

# SOUTHERN TEXTILE BULLETIN

VOL. 43

CHARLOTTE, N. C., DECEMBER 15, 1932

No. 16

## Wrap Your Product in Cotton!

You will be interested in the following specially prepared fabrics equally adaptable for roll or bale goods:

〔 Style 8225 to replace 7 oz. or 8 oz. burlap. 〕  
〔 Style 8226 to replace 10 oz. burlap. 〕

You will be pleased—Your customers will be pleased.

*You can obtain samples and complete information  
by writing or telephoning*

## CALLAWAY MILLS, Inc.

345 Madison Avenue

MURRAY HILL 2-7800

New York

### *Representatives*

#### BOSTON

110 Summer Street

#### CHICAGO

323 So. Franklin St.

#### AKRON

1002 Second National Building

#### ATLANTA

1308 Rhodes-Haverty Bldg.

#### PHILADELPHIA

984 Drexel Bldg.

#### ST. LOUIS

1302 Syndicate Trust Bldg.

#### CINCINNATI

1337 Cincinnati Enquirer Bldg.

# FLEXIBILITY

## *of Great Importance Today*

1. Barber-Colman *Improved* Automatic Spoolers are capable of running *four counts* of yarn on one machine at the same time.
2. Barber-Colman *Super-Speed* Warpers can be changed from one count to another *without loss of time*.
3. Barber-Colman *Super-Speed* Warpers can be creeled for stripe work with no loss of time; the pattern can be changed for each beam as simply and easily as though it were repeat work.
4. Barber-Colman *Improved* Machines can handle fine yarns as well as coarse.
5. Barber-Colman *Improved* Machines reduce the amount of time required to handle short orders.

*Barber-Colman Improved Machines*  
*are FLEXIBLE*

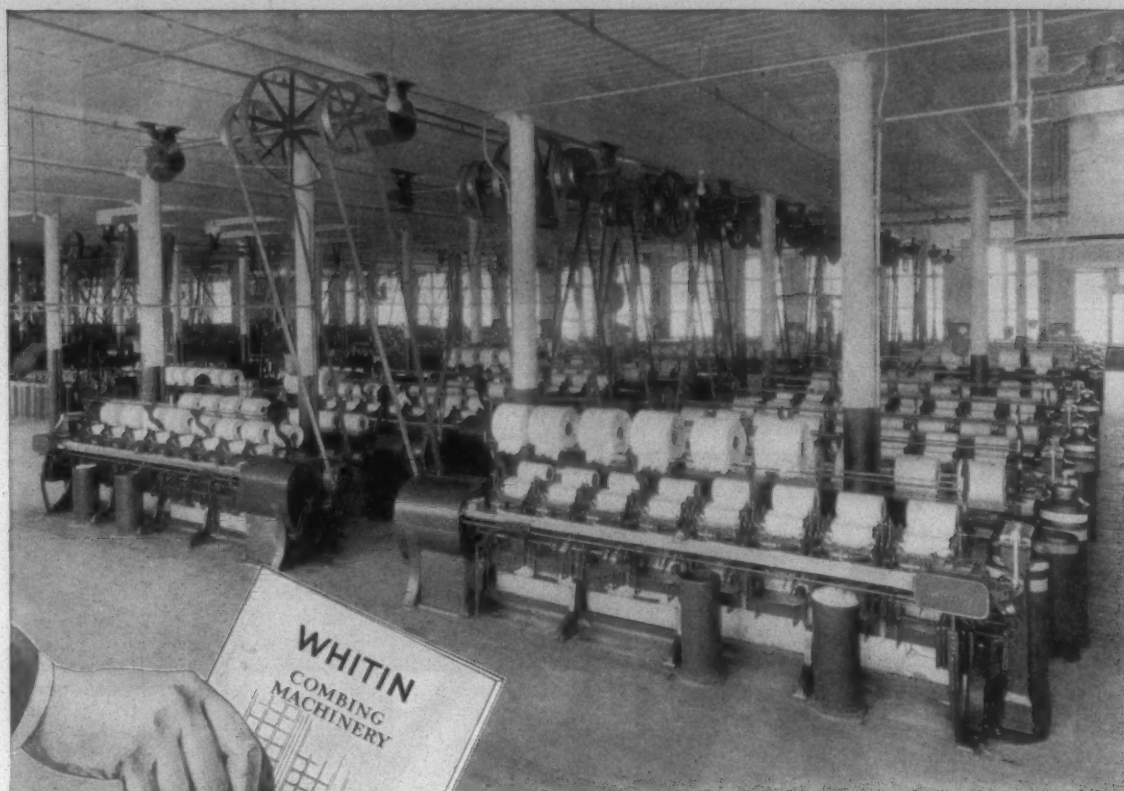
**BARBER - COLMAN COMPANY**

*General Offices and Plant* ROCKFORD, ILLINOIS

GREENVILLE, S. C.

FRAMINGHAM, MASS.





# Combing pays to-day

The new Whitin D-3 Comber has changed a once complicated and expensive process into a simple, inexpensive operation entirely free of skilled labor charges.

Combing has always been a very desirable process. Quality yarns are invariably combed. Now the Whitin D-3 Comber makes it possible to increase the quality of low and medium-grade yarns at a cost commensurate with what the

*finished product must be sold for in today's market.*

The illustration on this page is but one of a number of recent installations, and in every such case the increased strength and quality imparted by combing has added to the saleability of the product. It will pay you to study our D-3 Comber book and to have a Whitin textile engineer investigate the situation in your mill. No obligation of course.

## WHITIN MACHINE WORKS

ESTABLISHED 1831

Fales & Jenks Division

Woonsocket Machine and Press Division

Whitinsville, Massachusetts, U. S. A.

Charlotte, N. C.

Atlanta, Ga.

WHITIN MACHINE WORKS  
Whitinsville, Mass.

Send me a copy of the D-3 Comber Pamphlet.

Name .....

Address .....

City .....

State .....

# NATIONAL PRINTING VATS

## COLOR CARD No.196

A COMPREHENSIVE RANGE OF AN-  
THRAQUINONE AND INDIGOID VATS  
POSSESSING OUTSTANDING QUALI-  
TIES OF BRILLIANCY, UNIFORMITY  
AND FASTNESS • APPLY FOR COPY  
THROUGH YOUR NEAREST BRANCH



NATIONAL ANILINE AND CHEMICAL CO., Inc.  
40 RECTOR STREET NEW YORK, N. Y.

BOSTON .....	150 Causeway St.	PHILADELPHIA .....	200-204 S. Front St.
PROVIDENCE .....	15 Westminster St.	CHARLOTTE .....	201-203 W. First St.
CHICAGO .....	357 W. Erie St.	SAN FRANCISCO .....	145 Second St.
TORONTO .....	137-145 Wellington St., West		

# NATIONAL DYES



# SOUTHERN TEXTILE BULLETIN

PUBLISHED EVERY THURSDAY BY CLARK PUBLISHING COMPANY, 118 WEST FOURTH ST., CHARLOTTE, N. C. SUBSCRIPTION \$2.00 PER YEAR IN ADVANCE. ENTERED AS SECOND CLASS MAIL MATTER MAR. 2, 1911, AT POSTOFFICE, CHARLOTTE, N. C., UNDER ACT OF CONGRESS, MAR. 2, 1897

VOL. 43

CHARLOTTE, N. C., DECEMBER 15, 1932

No. 16

## Some Reminiscences on the Textile Industry \*

BY J. E. HARDIN

General Manager Proximity Manufacturing Company, Greensboro, N. C.

THE textile industry probably reflects in its history more thrilling events and more constructive accomplishments than any other of the fundamental industries. That is a broad statement, but the history of our industry in all of its different branches blazes across the horizon of many centuries, back as far as human records reveal.

The first inhabitants of this earth decorated their naked bodies with colors as varied as the proverbial Joseph's coat, and wore skins of animals for clothes. Madam Eve, with her fig leaves, was no trifling modiste. She at least utilized color and had originality in her designs.

The craftsmanship of color has done its full measure in recording and transmitting to us much of the doings, inspirations and ideals of the ancients. Color and textiles combined have wrought mightily in developing and hastening progress, in broadening the vision, intensifying the ambitions, solidifying the character, and keeping the lights of the human intellect trimmed and burning.

The mere making of fabrics and colors to beautify them, while fundamental and vitality necessary for human comfort and happiness, does not represent the major achievement of our important industry. But the intense interest in these processes, the failures, the successes and inspirations, the visions resulting therefrom, and the lofty motives of their most successful exponents, have done more than that: they have improved human character and broadened our spiritual horizon.

The pleasures and advantages to be derived from reminiscing are incalculable. If we pause occasionally and realize where we have come from in this industry; where we are now; and whither we are probably headed, we will no doubt have more interest in, and zeal for, the work in which we are engaged, and the goal toward which we are lavishing our life's best efforts.

### COLOR WAS BORN WITH LIGHT

"Where have we come from" in this textile industry and science of color? Color started with the beginning of earthly things. As soon as there was light there was color and instantaneously mortals were endowed with the faculty of discriminating between beauty and ugliness. Colors are much older than the knowledge of how to

produce them, or to imitate the original God-given standards. You dyers and colorists work to standards. The Great Jehovah set a few standards in his firmament during the first week of his earthly creations and bedecked the earth everywhere with hues and tints which will keep the most skilled of your craft busy trying to reproduce for many generations yet unborn. And then, Almighty God, who sits on His great White Throne will still hold in His mighty hand those immortal standards still unsuccessfully matched.

### A DOG, A FISH, A DYE

Clothes and colors have played a most important part in human desires and human necessities through all the ages of the world's history. The first interesting romance we seem to have relating to the production of color on cloths leads back in the form of a legend to the early days of that comely nymph, "Tyros," as she leisurely strolled with her lover on the glistening sands of the shores of the Mediterranean. When she saw her poodle dog bite into a strange fish she noticed a fascinating purple stain which remained on the puppy's mouth. Then and there she inspired her hot-hearted, eager-to-please, boss-dyer-lover to catch some more of those strange fish and extract that marvelous coloring material from them. With this he dyed a frock for her and thereby originated the famous Tyrian Blue, used for many centuries to color the royal robes of kings, princes and priests.

After that daring young prince, Alexander the Great, had led his conquering armies to India, Persia, Arabia and Egypt, plundering and appropriating to himself whatever was of interest and profit; he returned to his cultured Greek admirers with a strange substance which he named "vegetable wool," which in reality was some original variety of cotton, and with it also brought a marvelous process for producing gorgeous black, green and yellow colors. That blazed the trail and opened up and exploited great channels of trade and commerce, the chief articles of which were textiles and coloring materials. He then founded his namesake city—Alexandria, in Egypt, which became for thousands of years, and still is, the center of the world's finest and most silk-like cotton. Centuries ago there were heralded to the then known world the glories of that historic metropolis on the Nile, which produced marvelous fabrics with rich and wonder-

\*An address delivered at recent meeting of the American Association of Textile Chemists and Colorists, Greensboro, N. C.

ful colorings which are still in existence to baffle and awe textile designers and colorists of today.

Centuries ago the Persians developed a secret method for making rugs, by the manipulation of a few crude sticks and strings, and driven by that great dynamic force of human ambition to excel, they colored these rugs with mineral and vegetable dyes, the secret of the application of which no scientist knows. They represent an art, ambition and tradition, and a life's work which are admired and sought after in the world's most cultured centers.

#### EARLY HISTORY OF COLOR

On the other hand, block printing was brought by the Arabs into Spain when they conquered that country in the eighth century. This was a great improvement over hand painting on cloth as practiced by the Hindoos and was used exclusively for over a thousand years for producing figured textiles. But that process pales and flops into insignificance when compared with the modern sixteen-color intaglio monster textile printing machine, with delicately engraved copper rolls and using your vat and fast colors and driven by variable speed electric motors at terrific rates of perfect production.

When that daring navigator, Christopher Columbus, first came to American shores in 1492, he found the natives gently snoozing out their daily siestas in hammocks. Had he explored into Mexico and Peru, he would have found the Aztecs practicing the art of making cloth and dyeing cochineal red and other beautiful colors.

The Germans, Dutch, French and English improved and refined the vegetable, animal and mineral dyes, and afterwards they originated the aniline and coal tar colors, and next the synthetic colors and vat dyes.

Up to the outbreak of the World War, Germany had a world monopoly on the color industry. That crisis found America with its mammoth and highly developed textile industry apparently hopelessly enthralled in the very embarrassing predicament of having no dyestuffs. It was this crisis which gave birth to the spectacular development in our own country of a dye and chemical industry which astounded the world, all of which is just another tribute to American ability, ingenuity and resourcefulness.

Up to November 1, 1915, we had produced few dyestuffs in this country of any consequence except small quantities of sulphur colors, and it was about that time that research work really began in earnest and the American people were brought to the serious realization that something would have to be done immediately to develop a color industry in this country if the manufacturers of articles requiring color were to carry on.

I have in my possession a small bottle containing about two ounces of what is supposed to be the first synthetic indigo produced on the American continent. This was brought to Mr. Caesar Cone by the late Dr. Dow, early in the year 1917. Up to the outbreak of the World War the mills with which I am associated consumed about one-third of all the indigo imported into the United States. You can imagine the embarrassing position in which we found ourselves, when the supply of German indigo was so suddenly cut off. The only substitution left available and procurable in quantity for producing dark shades of blue, was logwood extract. The difficulties we experienced in producing a shifting and uncertain blue from a dyestuff naturally black, will remain as a nightmare to haunt the ambitions of those who propose any substitute for that old reliable blue dyestuff known as indigo and its synthesis. Today American dye manufacturers are able to furnish us with all classes of colors

of excellent quality and in successful competition with foreign manufacturers.

If you will pardon a political reference, I desire to state that I am one of those optimistic Southern Democrats, who does not believe in the creation of an unreasonably high tariff wall to protect to the point of unsound economics, our American industries against foreign competition, but only insofar as is necessary to equalize the cost of efficient production, and to give the American workman a just and fair wage compensation commensurate with his skill, intelligence and high standards of living. An unreasonable tariff places our American export goods in very distasteful favor with our foreign would-be customers and inclines them to exercise a full measure of retaliation against our goods.

#### DEVELOPMENT OF MANUFACTURING PROCESSES

It would be amiss in these reminiscences on textiles to omit a reference to the tremendous importance of the basic processes relating to the making of fabrics invented by those early Englishmen, Messrs. John Kay, James Hargraves, Richard Arkwright and Samuel Crompton. Their contributions to our industry can never cease to merit our sincere appreciation and admiration for their marvelous ingenuity. Their inventions opened the door to a new day for the production of fabrics of all kinds, and a new era for administration to human needs and pleasures. The discouraging days in which they wrought out their marvelous achievements and the trying conditions under which their inventions were exploited, and unappreciated by their contemporaries, are probably not fully enough realized by those of us who at best have contributed little except refinements to their great original basic ideas. We have accomplished far less in the way of valuable initiative and ingenuity, but we have entered into their labors and are reaping the benefits of their marvelous vision.

When Samuel Slater organized and built the first mechanical cotton factory on the North American continent at Pawtucket, R. I., in 1790, and brought the inventions of those world-famous Englishmen to this country and built them with his own hands into practical working machines, and put his mill into successful operation, he blazed the way for the start of the textile industry in this country. He did more than that. He was the original outstanding captain of our industry. He set a standard for this nation for improving the conditions of working people to a far greater extent than any of his predecessors or contemporaries. He was not only a pioneer in cotton manufacturing, but he organized and conducted in his own house the first Sunday school ever organized in America and taught his employees and their children to read and write and to revere and love the Holy Scriptures. Mr. Slater was, therefore, the original American cotton manufacturer; master builder, teacher and outstanding citizen and was responsible for successfully planting on this continent an industry which has contributed so lavishly to creating wealth, initiative and administering to human needs.

#### EARLY SOUTHERN MILLS

In 1828 Henry Humphreys founded the Mount Hecla Steam Cotton Mills in Greensboro, N. C., on almost the exact spot where we are now assembled. It consisted of less than 3,000 spindles and 75 looms, and made plain white sheeting, shirting and osnaburg and also cotton warp yarn. His customers came from far and near in wagons and camped around his factory, waiting and begging to buy the products of his wonderful ingenuity. He sent agents with part of his products in large four-horse wagons to other communities and sold them direct to the



individual families, taking in return cotton, wool, provisions, and articles of trade of the times for the use of his employees and to sell to others. He also devised and secured authority from the State to issue a system of local currency or money which was the popular and reliable medium of exchange in this community at that time. He established in this community a new means of livelihood and inspired new ambitions in the lives of the citizens of Carolina. He was another captain of the hosts of early industrialists and a merchant prince and financier, who established here a sound system of economics, which I doubt if to this day has been improved on four fundamental soundness, even by the modern textile merchants, jobbers, chain stores and bankers.

Mr. Humphrey's face was turned toward the rising sun and he lighted the way for those of us who, though less worthy in initiative and accomplishment, but have tried to enter into his labors and are traveling in comfort, safety and prosperity the trail which he so courageously blazed.

One of Mr. Humphrey's young apprentices was the ambitious Edwin Holt of Alamance county, who a short time afterwards bought a few crude spindles, wrought by hand in a blacksmith shop in Philadelphia and hauled that machinery in slow ox and horse-drawn wagons over long and rough muddy roads all the way from Philadelphia to Burlington in Alamance county, North Carolina. He built a few crude power looms and developed a small water power, and started up the original cotton mill, known as the Alamance Factory. From the Mount Hecla Steam Cotton Mills and the Alamance Factory sprang the present textile industry of the Piedmont section of the Carolinas, which now boasts more than ten million spindles and is probably the highest developed and, in normal times, the most successful textile area which has ever existed throughout the history of the world.

Tradition relates that Mr. Holt hired a French tramp to teach him how to produce colors on cotton yarn. He made his first dyeings in a cast iron wash pot, which is still in existence and treasured by his successors as a loving relic of those courageous times. He rinsed and developed the stock in wash tubs and hung it out on the fence to dry and warped and prepared by hand his yarns for weaving, and thereby established the first colored goods mill in this section.

These early pioneers laid a sub-foundation deep down on a solid rock for the textile industry which has meant more for the genuine development of the South in all of its rich fulness than any of their military or political contemporaries. It will interest you to hear some of the formulae for dyeing in use about that time.

#### TO DYE GREEN

"Take red oak and hickory bark, equal parts, boil them together very strongly, then take out the bark and pour in the vitriol and indigo very slowly; make the dye boil, then put in the hanks of yarn and keep stirring, then boil 15 minutes, then remove the stock and give it the air; then put the stock back into the liquor and boil 5 minutes longer, take the stock out, hang it in the shade and give it some more air. One-half pound vitriol, one ounce indigo, two pounds alum to dye twelve pounds of wool. The dyeing to be made in a copper vessel. The indigo and vitriol to be mixed overnight."

#### TO DYE RED

"Two pounds of Brazil wood will dye two pounds of yarn. Boil it in a copper kettle until the color has been extracted out of it, during which time the yarn will be washed clean and let it lay in a strong alum water, then strain the dye and rub the stock and dye and alum water

together; put all in a bottle and simmer them slowly. Be sure to give the stock the air frequently. This quantity will dye a beautiful crimson, and by using half that quantity a paler shade of crimson will be dyed."

#### TO DYE YELLOW

"Make a strong soap suds with warm water, put the Arinetto into a thin bag and rub it out in the suds, then put in the hanks of yarn and let them soak an hour or more, then put them with the suds into a pot and boil 15 minutes, take them out, dry and then wash them in cold water."

These methods of dyeing and producing colors on textiles may seem crude to you doctors of chemistry and highly specialized modern dyers and colorists, but please remember that these were the best methods that they had at their command. The fastness, permanence and beauty of some of those colors were really remarkable.

As to the present position of the textile and color industry, I need not elaborate on that, because we are all familiar with it. One of the most tragic situations in it has developed within the last few years. When we realize the condition which now exists in some of our sister States in the East and view the great textile plants which have flourished in some of those States for generations, but which are now still and cold in the presence of liquidation, we are saddened to realize the underlying cause of this catastrophe. I am persuaded by some of my friends connected with those plants, in whose opinion I have confidence, that these unfortunate conditions are largely the result of a lack of co-operation between owners and employees and State governments. These three fundamental elements have not worked together, and the lack of harmony has all but ruined a great industry.

The rapid growth and phenomenal success of cotton manufacturing on our own Piedmont section must not be taken by us too much as a matter of course, nor that it will continue simply because we are so singularly blessed with so many natural advantages. We who live in this section and are engaged in this industry must recognize the tremendous responsibilities that devolve upon those of us connected with and responsible for its management. We must bear in mind that we are obligated to those who have invested capital in this industry and are in like manner responsible to those who are working with us to the end that hearty co-operation for the common good of all must be the chief incentive for the full development and carrying on of an industry which has created a new day and has caused the sun of hope to shine again on a section which was so tragically blighted only a few decades ago.

In the early stages of the development of the cotton manufacturing industry in the South, only plain and staple goods were made, but in recent years we have expanded into the manufacture of finer classes of fabrics. The dyeing and finishing end of the business has also been developed hand in hand with the making of finer goods, until today we have in this section of the South a high development of the bleaching, dyeing, printing and finishing branches of the textile industry. In the early history of colored goods here in the South, none of the mills pretended to do even the simplest processes of finishing. Cheap plaids, gingham and cheviots were shipped all the way to the North to be calendered, napped, tented and finished.

As recently as in the early nineties, there was established here in Greensboro probably the first plant south of the Mason and Dixon's line for finishing colored cotton

(Continued on Page 27)

# Methods of Getting Co-Operation in Accident Prevention Work \*

BY T. M. FORBES

Secretary, Cotton Manufacturers Association of Georgia.

It is an accepted truth that the effectiveness of an accident prevention program is governed entirely by the interest manifested by the plant officials and by the support which it receives from the management.

Having assumed this responsibility the management should then formulate a definite accident prevention policy for the company in which is outlined the various activities to be conducted and the responsibilities for carrying out this policy. It is quite necessary that this responsibility for accidents be fixed and that it be generally understood that all accidents will be ultimately brought to the attention of the company officials. The company's accident prevention policy must not only be expressed in terms of the factors that make for greater safety, but it must provide for a system of reports and investigations by which results may be measured and the effectiveness of the program determined.

To begin with, it is necessary to establish a definite objective toward which the program must be directed. The establishment of the objective must carry with it the plan of action by which it is to be accomplished. In this case, when the objective, generally speaking, is to be the reduction of accidents, the present accident rate must be first determined in order to set the goal.

Having set up the proper organization to which is delegated the responsibility for carrying out the plans declared in the company's accident prevention policy, it is then necessary to provide for regular reports from which the results of the work can be found and measured by the management. Too often a safety program loses the momentum of its enthusiastic beginning because of the failure of the chief executive to keep up with its progress. Reports of this work should be just as essential as production reports, and earnings statements, and they should be carefully studied by the management in conference with those who supervise this activity.

Since there are two major classes of accidents, the problem must be approached from both directions. It is generally agreed that only about 15 per cent of all accidents are caused by physical hazards in machinery, buildings, equipment, etc., while the remaining 85 per cent of accidents result from unsafe practices on the part of the employees.

Naturally, before the workers can be expected to lend their full co-operation, the management must first do everything possible to eliminate all physical hazards which might cause accidents. In many cases this approach to the problem is often limited to the guarding of machines in accordance with insurance company recommendations and the elimination of dangerous elevators and other major hazards. Not only should these hazards be studied and corrected to the smallest detail, but equally careful attention should be given to the conditions under which the employee works with relation to

adequate lighting, proper ventilation, reasonable operating schedules, and other similar factors. It is, undoubtedly, true that many accidents result from bad lighting, inadequate ventilation or excessive heat, fatigue from too long working schedules and improper arrangement of mechanical equipment. Any one of these conditions can make an employee both physically and mentally dull and less alert, and, therefore, more susceptible to accidents, through no fault or carelessness on his part. When the management has corrected all these conditions, over which it can and must have control, then the employees can be expected to give their co-operation in accident prevention work.

The next problem then is the correction of unsafe practices, which is by far the greatest cause of accidents and the one that is most difficult to correct.

I think everyone will agree both from experience and from theory, that the most satisfactory approach to the problem of eliminating unsafe practices, through proper education of the workers, is through the use of employee safety committees.

It is a matter of common knowledge that better employee co-operation is always secured in a safety program if the employees are made to feel a definite responsibility for its execution. They should be made to feel that the safety committee is being organized for the purpose of delegating that responsibility to them, and that the attitude of their fellow workers is dependent upon their use of this responsibility. Through their position of leadership on the safety committee they will be able to wield a powerful influence among the other employees, whom they represent.

The personnel of the safety committee and the type of committees will depend largely on the individual conditions existing in each particular plant. In the case of a small plant it is usually advisable to have one safety committee with one representative from each department. In a large plant it has been found better to make a thorough study of the organization and the hazards involved, but generally speaking it is customary to have a separate committee for each major department and when necessary one committee to represent several minor departments, these various committees working in conjunction with an executive safety council composed of the foremen and officials. In determining the representation from each department consideration should be given to the hazards involved as well as to the number of employees. It may be found practical to include foremen as well as employees on these committees.

It is generally agreed that better results are always obtained by a rotating system of committee members. Under this plan the personnel of the committee is changed regularly at intervals varying from one month in some cases to a year in others.

Above all, the effectiveness of the safety meeting is dependent upon programs that have been carefully pre-

(Continued on Page 23)

\*Extracts from an address delivered at Third Annual State-Wide Industrial Safety Conference of the North Carolina Industrial Commission, Winston-Salem, N. C.



1932

# IT'S NEW IT'S BETTER

No. 414  
Dutcher  
Temple



The Result  
of  
116 Years  
of  
Progress  
since  
the Invention  
of the  
First Temple  
which  
was also a  
Draper  
Product

Ira  
Draper's  
Temple



1816

In Design, in Methods of Manufacture it  
is the Best Temple ever built.  
It is Stronger.  
It Resists Wear.  
It Operates Better.  
Its Parts are More Closely Fitted.  
There is Less Play, Less Lost Motion.  
It Reciprocates Better.  
If Repairs are needed, its Standardized Parts  
fit where the old ones come off.

## It Means

Better Cloth  
Larger Product  
Longer Life for the Temple  
Lower Cost for Repairs  
Less Work for the Fixer  
Practically No Stops for Temple Repairs

## Made for E Model Looms

Similar New Temples Coming  
for other Loom Models

## This is the Temple we Recommend

Where a 2½" Single Roll is desired  
Allowance will be made for Thread Cutting  
Temples returned to be replaced by No. 414

## Draper and Dutcher Temples

Have been the American Standard for  
More than 100 years  
American Temples Have Always Been  
the World's Best

# DRAPER CORPORATION

Hopedale Massachusetts

Southern Offices Atlanta Ga and Spartanburg S C

# Discussion On Weaving At Spray Meeting

THE afternoon session of the meeting at Spray, N. C., on December 2, of the Virginia-Carolina Division of the Southern Textile Association was devoted principally to weaving and related subjects.

The discussion was led by D. F. Short, overseer of weaving at the Consolidated Textile Corporation, Lynchburg, Va. The report of the discussion follows:

Mr. Short: Before we can weave yarn we have to prepare it. There is one point not on our list of questions that I want to mention. Perhaps some of you can tell us how to eliminate the trouble I have in mind.

## YARN HANGS ON DROP WIRES

Many times you go around your warpers, after you have gotten this good yarn made right jam up within the usual four to six pounds of the breaking strength, and you notice around the warpers a lot of wild yarn coming through, hanging on the beam. Do any of you have that trouble? It comes through the slashers and hangs up on the drop wire.

Mr. McCombs: The creeler hands, and carelessness in the spooling.

## WHERE TO COUNT ENDS ON SLASHER

Chairman: Here is another question: "*In creeling any set of slashers on wide work, do you count your ends behind the slasher, or do you count it in in front of the slasher? Do you count in your sets behind the slashers?*"

Mr. C.: We did both until recently. We counted in our sets at the front. To save waste we changed and count it in from the back.

Chairman: Can't you get a better lease by counting from the front?

Mr. C.: I don't know. You can get a mighty good lease by counting from the front.

## DEPTH TO RUN IMMERSION ROLLS IN SIZING

Chairman: We will pass on. "*Do you run your immersion roller in your size vat as deep as it will go? If you do, why?*"

R. T. Craven: We do not run our roller to the bottom on our work. We use the wood beams. It is a hard matter to get those heavy beams through. Some of it is heavy size. To run those rollers to the bottom would cause breaks in the warp. But if running light beams, of uniform weight, I would prefer running the rollers to the bottom. I find that we have to be governed by our conditions, by the material that we are using.

A. J. Matthews, Overseer Weaving, Bedspread Mill, Leaksville, N. C.: For a time I heard it said that it was not a good idea to run the immersion roller very low, because of the fact that the yarn would have more time to roll up. I paid that matter considerable attention, and I decided that I would put it down low because I felt that the size would have more time to penetrate. I feel that I get better results by running it down far.

Another thing; where we have no automatic apparatus to keep the size to a certain level in the box, it takes it only a minute or two to get down too low, unless the slasher man is there all the time to watch that. So I find I get better results by running the immersion roller down to the bottom.

Chairman: Some people say, and I think it is true, that if you run your immersion roller as low as you can

get it the steam gives it a chance to kind of ruffle that yarn, and your line kind of tapes on your cylinders, and you do not get as even a sheet of yarn on the cylinders as you should. Most of us like to keep our yarn in the size box and get as much penetration as we can.

## HUMIDITY CONTROL FOR HEAVY AND LIGHT SLEY

The next question is: "*How would you control humidity and temperature in a weave room having heavy and light sley weaving in the same room?*" Mr. Terry, of Fieldale, can you give us some points on that?

Mr. Terry: I can't tell you much. We have mostly terry work. I would suggest that we use light humidity and try to run it as well as we can. It is all in the same room, and we just have to split the difference.

Chairman: Do you have humidity controls?

Mr. Terry: Not so good.

Mr. D.: I think so far as possible you should put your light construction in one place and the heavy construction in another, and work around that.

Mr. E.: Would it be practicable to size one construction a little heavier than the other and then carry humidity to control your hard weave?

Chairman: That is the way we tried to do it. We try to control our humidity—try to run the relative percentage of humidity that will run the broadcloth best and take care of our sheetings by sizing a little heavier than we would ordinarily size.

## RELATIVE HUMIDITY ON HEAVE BROADCLOTHS

Here is another question I should like to ask. "*About what percentage of relative humidity do you find best if you are running broadcloth construction as heavy as 160 or heavier?*"

Mr. McCombs: I have always tried to run a relative humidity of about 83 per cent—83 to 85—for it.

Chairman: We find, in our case, that with a relative humidity of about 82 to 86, which gives about 12.5 per cent of moisture regain, our broadcloth runs best.

Question: What percentage of size are you putting in your broadcloth?

## LET-OFF ON COTTON, SILK OR RAYON WEAVING

Chairman: Let's go on. "*What type of let-off is best for cotton, silk, or rayon weaving?*"

J. T. Brackett, Overseer, Lily Mill, Spray, N. C.: We went through quite a bit of trouble with the let-off. I am up here to see if I can not get some information on let-off. We have been working for a couple of years trying to get the best on rayon and silk. We are getting on pretty well now, using graphite on the rolls, but I should like to get away from that; it gets on our cloth. We have the rope let-off. We find in running the rope let-off we have to watch the humidity in the room. We usually run our humidity around 70 to 72. We find if it gets higher than that our ropes stick, and it gives a bar effect in the cloth. We find it better to hold our humidity to about 72.

Mr. Craven: My experience with silk was very short; I worked with it about three months. I was trying to make a piece of plain rayon cloth. If rayon goes in the cloth, if there is a thousand of an inch variation, it will make wavy cloth. It seems to me it would be necessary to have a positive let-off, because there is no way of controlling the friction let-off.



## Cotton Crop Put At 12,727,000 Bales

Washington.—The 1932 United States cotton crop was estimated by the Department of Agriculture at 12,727,000 bales, an increase of 780,000 over the November 1 forecast.

Explaining the increase, the department said it was due partly to better yields per acre in all the major producing States and also to the fact that early reports of acreage planted to cotton were unduly low.

The estimate was of December 1. The total crop last year was 17,096,000 bales and in 1930 it was 13,932,000.

The average yield per acre was estimated at 162.1 pounds compared with 201.2 last year.

The yield is estimated at 162.1 pounds per acre, compared with 155.2 pounds indicated a month ago and 201.1 pounds produced last year.

Revised figures of this year's were announced showing the acreage in cultivation July 1 to have been 38,327,000 acres and that left for harvest as 37,589,000 acres, with a total abandonment of 1.7 per cent after July 1.

The estimate of production this year by States follows:

Virginia, 28,000; North Carolina, 640,000; South Carolina, 695,000; Georgia, 845,000; Florida, 15,000; Missouri, 285,000; Tennessee, 450,000; Alabama, 930,000; Mississippi, 1,15,000; Louisiana, 610,000; Texas, 4,445,000; Oklahoma, 1,080,000; Arkansas, 1,260,000; New Mexico, 76,000; Arizona, 82,000; California, 126,000; all other States, 10,000; lower California, old Mexico, 13,000. (Latter not included in United States statistics.)

### GINNING REPORT

Washington, Dec. 8.—Cotton of this year's crop ginned prior to December 1 was reported today by the Census Bureau to have totalled 11,631,361 running bales, including 583,152 round bales, counted as half bales, and 6,227 bales of American-Egyptian.

To December 1 last year 15,018,403 bales had been ginned and to that date two years ago, 12,837,099 bales were ginned.

## Hunter Reorganization Plan

The plan for liquidating the Hunter Manufacturing and Commission Company, the organization and establishment of a new company to take over the commission business, and for the appointment of a liquidating committee is now on file with the North Carolina Bank & Trust Co. and its branches. It provides for the appointment of the following liquidating committee: J. A. Chapman, Donald Comer, J. C. Evins, Alfred Moore, John W. Porter, James C. Self, George M. Wright and Elliott W. Springs, representing a group of creditor mills owning more than \$3,900,000 of the debt of the company; Geo. W. Mountcastle, representing the preferred stockholders, and Daniel Burke, the common stockholders.

"The assets of the company are in large part accounts receivable and notes and shares of stock of Southern cotton mills. In the present state of the industry a considerable period may be required for their orderly liquidation. The claims of creditors take precedence over the rights of the stockholders to share in the process of liquidation, and if and when the creditors and the expenses of liquidation shall have been paid, the preferred stockholders will be entitled to participate ratably in the remaining proceeds of liquidation, if any, to the extent of their respective preferential rights before any payment is made to holders of common shares.

"The plan contemplates the incorporation of a new company under the laws of the State of New York or other States as the committee may in its discretion determine, to be known by such distinctive names as the committee may select, and that this new company will enter into arrangements with the cotton mills becoming parties to the plan for the sale of their products; that the new company is to have presently an authorized capital consisting of three classes of stock: (1) Preferred stock, 5,000 shares, of the par value of \$100 per share, entitled to cumulative dividends at the rate of 7 per cent per annum and upon liquidation to payment at the rate of \$10 per share and cumulative unpaid dividends before payment to holders of any other class of stock, to be redeemable at \$105, and accrued dividends, and to have no voting rights except in the event of dividend default as provided in the Certificate of Incorporation; (2) Class A stock, 80,000 shares, of the par value of \$2.50 per share, with the sole voting rights (except for the right of the Class B stock to elect two directors) but otherwise sharing equally with the Class B stock, share and share alike, as respects the right to dividends and to participation in the proceeds of liquidation; (3) Class B stock, 80,000 shares, of the par value of \$2.50 per share, with like dividend and liquidation rights as the Class A stock, but not entitled to any voting rights except the right to elect, voting as a class, two directors.

"Approximately 4,000 shares of the preferred stock and 70,000 shares of the Class A stock are to be subscribed for or underwritten by the participating mills and are to be paid for in cash at par, subject to the plan being declared operative. The Class B stock may be subscribed for by the preferred and common stockholders of Hunter Manufacturing and Commission Company who participate in the plan, at the rate of one share of Class B stock of the new company for each share of stock, preferred or common of Hunter Manufacturing and Commission Company deposited.

"Howard E. Coffin, whose business career in connection with the automobile and aviation industries is well known and whose assistance rendered to the Government in the war and post-war periods has won for him a national reputation, is expecting to become the chief executive of the new company.

"The preferred and common stockholders of Hunter Manufacturing and Commission Company who participate in the plan by depositing their stock with North Carolina Bank & Trust Co. as depository under the plan will receive a receipt exchangeable, if and when the plan shall have been declared operative, for (1) bearer warrants evidencing rights, under the plan, to subscribe for shares of Class B stock of the new company, such rights to be exercisable at a price of \$2.50 per share during the first three months after the plan shall have been declared operative, and at a price of \$3.00 per share during the next three months, and (2) transferable certificates of beneficial interest in the proceeds of liquidation of Hunter Manufacturing and Commission Company. It is hoped that there will be a market for the bearer warrants evidencing rights to subscribe to shares of Class B stock, and that stockholders may be able to sell these rights if they do not wish to use them. Stockholders should have in mind that any sales of these warrants will carry the right to subscribe to stock of the new company, but not their interest in the proceeds of liquidation of Hunter Manufacturing and Commission Company evidenced by the certificates of beneficial interest to liquidation. Deposits of stock certificates will be received to and including December 29, 1932."

# Boiler Efficiency, Steam Turbines and Heating Systems \*

BY L. L. VAUGHAN, M.E.

North Carolina State College, Raleigh.

WHILE the history of the development of boilers and turbines is not of any particular interest to you, I feel sure that a little knowledge of that would be helpful, so that you will appreciate the progress which has been made and the many obstacles and difficulties which have been overcome in the engineering field leading toward maximum capacities with minimum expense—or high economies, if you want to put it that way. Incidentally, the steam boiler, as such, and the steam turbine, as such, put in their appearance simultaneously, about 150 years B. C., when Hero, of Alexandria, described not only existing devices of his predecessors and contemporaries, but also an invention of his own which utilized the expansive force of steam for raising water above its natural level. He clearly describes three methods in which steam might be used directly as a source of power: Raising water by its elasticity, elevating a weight by its expansive power, and producing a rotary motion by its reaction on the atmosphere. The third method, which is known as "Hero's Engine," is described as a hollow sphere supported over a caldron or boiler by two trunnions, one of which was hollow and connected the interior of the sphere with the steam space of the caldron. Two pipes, open at the ends and bent at right angles, were inserted at opposite poles of the sphere, forming a connection between the caldron and the atmosphere. Heat being applied to the caldron, the steam generated passed through the hollow trunnion to the sphere and thence into the atmosphere through the two pipes. By the reaction incidental to its escape through these pipes, the sphere was caused to rotate; and here is the primitive steam reaction turbine.

That was made more or less as a plaything, but it was made 150 B. C., or approximately then, by Hero, of Alexandria, in northern Egypt. Hero also wrote considerable concerning the use of steam for doing work, to use steam to lift bodies by its expansive force, and to use steam to drive mechanisms; and he wrote a book entitled "Pneumatica."

So far as we are able to trace, the steam turbine and the steam boiler remained more or less dormant until about 1629 A. D., when an Italian by the name of Giovanni Branca built another turbine, using a similar type of boiler, with no tubes—just a hemispherical-shaped boiler, the turbine using the impulse principle used now by some of the de Laval and Westinghouse turbines. He was able to make it raise and drop weights periodically, using an ordinary pin beveled gear. That operated and pounded up some corn (that is, in the grain).

Coming over into England, about 1705, we find a man, Newcomen, who had made what was known as an atmospheric engine, which was used for pumping water out of the coal mines. That engine really worked indirectly, in that the steam was admitted from the boiler through the steam pipe into a cylinder, which was vertical, open at

the top, and the piston working vertically up and down, with the long piston rod going up and making connection to what we would call a walking beam, or what is sometimes designated as a sea horse. That would work up and down alternately, the piston end operating the pump. That engine worked indirectly, however, so far as the steam was concerned. The steam was admitted into the lower part of the piston and would push the piston up. The steam was cut off at the valve and cold water injected below the piston. That would condense the steam, so a vacuum would be formed, and the atmospheric pressure would drive it down. It was the down stroke that pumped the water, so it was steam indirectly that operated it.

A little later a young man named James Watt got hold of this and improved it and made it into practically the form we have today. He also gave us the definition of a horsepower—built an indicator to get it and actually performed all the experiments necessary to find what a horse could do, by working with horses on the London docks, or the Manchester docks, and finding what work they could do. All the time the boilers were rather crude pieces of machinery; they were very crude. Some of them were cast iron, partially; some were even made of staves, with ordinary hoops around them, so that they had water boiling in a tub with the wooden top, in some cases. It was a little later than that that Watt himself improved the engine and also did something toward the boiler. But the boiler really began to take form about 1829, when George Stephenson, who really gave us the commercial locomotive in England, built a tubular boiler, with some tubes or flues through it, and used the exhaust from his engine to accelerate his draft so the combustion would be sufficient to give him steam enough to drive his locomotive. That locomotive was known as the "Rocket" and was put into operation in 1829.

Stephenson did not build the first locomotive; another Englishman, Threvithick, built the first one. But it did not operate on a track; it operated on the street, just as our automobiles do, at the tremendous rate of five miles an hour; and he had couriers on the street to warn people and keep them from getting run over.

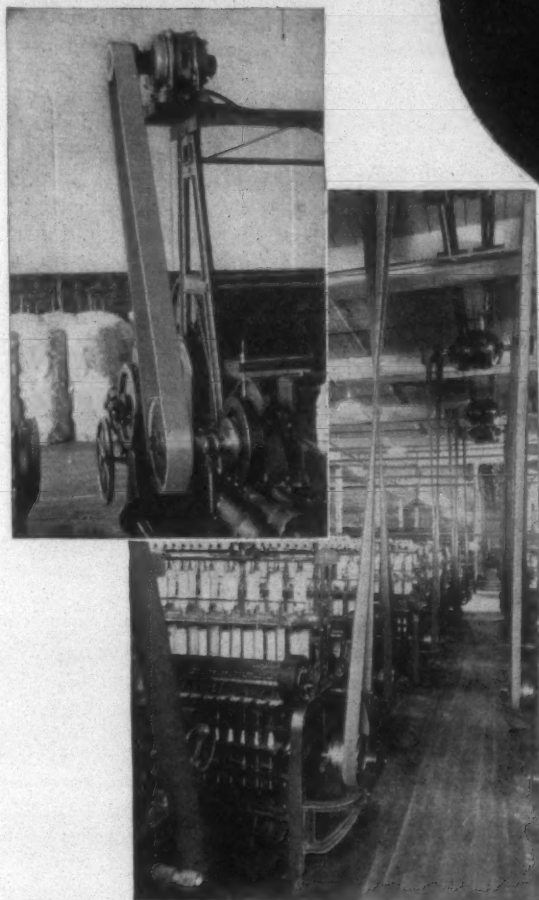
About 1884 a man named Parsons, also English, revived the principle which Hero had used in 150 B. C. and built the reaction turbine which is used today. About that time Dr. Gustaf de Laval was putting into operation the principle which Branca had used in 1629. So about 1884 to 1892 these two turbines were being developed, the reaction turbine in England, and the impulse turbine in this country. More recently Curtis, with the General Electric Company, has improved the de Laval turbine. That is known as the impulse turbine, or General Electric turbine, or impulse Westinghouse. Those two types have been much improved since 1900. In 1892 a small turbine was built and put into a boat, and operated for the propulsion of ships. In 1907 the turbine

(Continued on Page 16)

\*Paper before Carolina-Virginia Division of Southern Textile Association.



# There is No Substitute for Experience



All Goodyear products are constantly under development and test for further improvement. Each new advance is completely mill- or mine-proved when offered for industrial service.

## TEXTILE BELTING

**S**OMETHING much more valuable to you than even the best of rubber and the strongest of cotton cord is built into Goodyear Belts for textile drives.

It is the intimate knowledge which Goodyear has of textile mill requirements, gained from actual experience that has mill-proved these belts.

How to design and how to build belts that will be subject to an absolute minimum of stretch, that will resist fraying under shifting, that will not rip or split at the center — these are a part of Goodyear experience, built into Goodyear belting, and available to you at no premium cost.

For example, Goodyear COMPASS (Cord) Endless Belt is the most nearly stretchless belt made. It is truly endless, made of cords laid side by side, bound with Goodyear rubber, and enclosed in a fabric envelope that is double on the pulley side. The cord carries the tensions; the cover takes the wear. An exceptionally serviceable belt for individual motor drives in Vertical Openers, Pickers, Tappers and Twisters.

Other specially designed and constructed Goodyear Belts are recommended for long wear and low replacement costs on Cards, Frames, Slubbers, Spoolers, Looms, Slashers and Breakers.

Why not talk with the G. T. M. — Goodyear Technical Man—about the belt equipment he has specified for many mills, assisting their operations and saving them money? He will call promptly at your suggestion. Write to Goodyear, Akron, Ohio, or Los Angeles, California.

THE GREATEST NAME

IN RUBBER

# GOOD YEAR

## PERSONAL NEWS

G. F. Fields, of Lumberton, N. C., is now assistant master mechanic, Charles Mills, Red Springs, N. C.

— — Napier, of Hemp, N. C., has accepted position as overseer weaving, Puritan Mills, Fayetteville, N. C.

L. M. Miller, of Dover Mill, Shelby, N. C., is now master mechanic, Charles Mills, Red Springs, N. C.

Earle Bagwell now has a position with the office force of the Watts Mills, Laurens, S. C.

Herman Taylor has resigned as assistant designer at the Watts Mills, Laurens, S. C., to accept a position as assistant to the president at Pelzer, S. C.

John Kittrell, of Landrum, S. C., is now assistant designer at the Watts Mills, Laurens, S. C.

C. T. Littlejohn, of Greenville, has become overseer of weaving at the Watts Mills, Laurens, S. C.

P. C. Pearce has resigned as overseer weaving at the Watts Mills, Laurens, S. C.

A. E. Nance, of Kannapolis, N. C., has become overseer of carding at the Watts Mills, Laurens, S. C.

O. O'Daniel has resigned as overseer of carding at the Watts Mills, Laurens, S. C.

Bert Kennington has become overseer of the silk room at the Watts Mills, Laurens, S. C.

Ballie Kirby has resigned as overseer of the silk room at the Watts Mills, Laurens, S. C.

D. R. Pearson is now night overseer of weaving at the Watts Mills, Laurens, S. C.

O. F. Hartsell has resigned as night overseer of weaving at the Watts Mills, Laurens, S. C.

W. D. Thornburg has become superintendent of the Fountain Mills, Tarboro, N. C.

L. F. Williams has become overseer of weaving at the Fountain Mills, Tarboro, N. C.

W. D. Burnett has resigned as overseer of weaving at the Fountain Mills, Tarboro, N. C.

G. G. Simmons has become assistant superintendent and designer at the Watts Mills, Laurens, S. C. He has been in the office of the mill.

G. T. Bostic, formerly superintendent Tolar, Hart & Holt Mills, Fayetteville, N. C., is now overseer carding and spinning, Charles Mills, Red Springs, N. C.

L. A. McAlister, formerly with Puritan Mills, Fayetteville, N. C., is now overseer weaving, Charles Mill, Red Springs, N. C.

J. W. Webb, formerly overseer cloth room, Dover Mills, Shelby, N. C., is now overseer cloth room, Charles Mills, Red Springs, N. C.

W. N. Robbins has resigned as assistant superintendent and designer with the Watts Mills, Laurens, S. C., to accept a position with J. P. Stevens & Co., New York selling agents.

A. K. Landau, formerly with the Boston offices of the Saco-Lowell Shops, is now manager of the Albemarle Weaving Company, Charlottesville, Va.

J. V. Thomason has been promoted from overseer of weaving at the Hart Mills, Tarboro, N. C., to superintendent of the Fountain Mills, of the same place. S. L. McCracken recently resigned as general superintendent of these mills, as previously reported.

C. E. Honeycutt and J. L. Alexander, of Gastonia, have secured a patent on a method for refluating steel rolls on drawing and spinning frames, according to Paul B. Eaton, patent attorney of Charlotte.

M. C. Pierson, of Charlotte, has received a patent on a hosiery inspection device operated by compressed air, rather than by hand, it is reported by Paul B. Eaton, Charlotte patent attorney.

Henrl G. Hester, for 62 years active secretary and superintendent of the New Orleans Cotton Exchange and who is internationally known as a cotton statistician, has resigned and was elected secretary emeritus at his own request. He is succeeded by Henry Plauche, who has been Mr. Hester's assistant for the past 30 years.

## OBITUARY

### C. L. LYTTON

Gastonia, N. C.—C. L. Lytton, prominent 47-year-old Gastonia textile executive, died in the Charlotte Sanatorium last Thursday as the result of an attack of acute appendicitis with which he was stricken Wednesday.

Mr. Lytton had been superintendent of the Flint Mills here since 1919 and was known in textile circles throughout Gaston county. He is survived by his widow, Mrs. Hattie Sherrill Lytton, and the following children: Coyt, Kenneth, Margaret, Charles, James, Catherine and Evelyn Lytton, and Mrs. Roy Feamster, all of Gastonia. Surviving also is one grandchild, Tom Feamster, three brothers, T. L. and John Lytton, of Gastonia, and L. L. Lytton, of Lumberton, and two sisters, Mrs. Wade H. Dellinger, of Gastonia, and Mrs. Van Skipper, of Durham.

Funeral services were held at the residence Sunday afternoon.

### L. P. DUNCAN

Spartanburg, S. C.—Lawton P. Duncan, 32, superintendent of the Inman and Riverside Mills, died in a hospital here Saturday night of pneumonia. He had been ill a week.

Mr. Duncan was a native of Perry, Ga., and a graduate of Georgia Tech. His wife was killed in an automobile accident here in November, 1931, and Mr. Duncan was seriously injured.

Funeral services were held here Monday and the body sent to Mapleville, Ala., for interment.

## Print Cloth Committee Meets

Greenville, S. C.—Only routine matters were discussed at the meeting of the executive committee of the Print Cloth Group of cotton manufacturers, it was announced Friday by W. D. Anderson, chairman.

Only three members of the committee, Messrs. Cole,



Symmes and Orr, were absent, and complete harmony marked the meeting.

Rapid progress has been made during the last few weeks, he said, and W. P. Jacobs, secretary-treasurer, will in the early future visit many mills in other parts of the country to secure their co-operation.

Mr. Jacobs returned to New York following the meeting.

Many mill officials have not yet had the plan explained to them, and until this is done it will not be possible to say just how large a percentage of the print cloth mills will be represented. At the organization meeting here several weeks ago, however, approximately 66,000 of the 83,000 looms making print cloths for sale were represented.

No New York office will be maintained, certainly not for the present, Mr. Anderson said, and most of the association's affairs will be handled from their Clinton, S. C., office under Mr. Jacobs' direction.

Howard Coffin, head of reorganized Hunter Manufacturing and Commission Company, was present by invitation at the meeting.

### Charlotte Office for E. F. Houghton & Co.

E. F. Houghton & Co., well known manufacturers of oils and leathers, recently opened a district office in Charlotte. D. O. Wylie, representative of the company, has made headquarters in Charlotte for some time and opening of the Charlotte office is to provide better service for Houghton customers in this section.

The new district office will serve the Carolinas in addition to the personal services of H. J. Waldron, district manager at Greensboro, R. J. Maxwell, district manager at Greenville, and Mr. Wylie at Charlotte. Miss Kathleen Wakefield, formerly with the Southern Textile Association, is office manager.

### Improving Business Conditions Seen

Chicago.—Leaders in the industrial, financial, business and transportation worlds were told by the president of the American Bankers Association that the nation's financial outlook has been unmistakably improved.

In addition, said Francis H. Sisson, head of the bankers organization, there existed the most favorable factors for business recuperation since the boom days of '28.

Sisson spoke at the 35th annual banquet of the Illinois Manufacturers' Association, the world's largest organization of its kind. He analyzed the influences on business and declared the good outweighed the bad.

"Our banking structure is very much sounder at the close of this year than it was at the beginning of 1932," Sisson said.

"It is apparent that the Federal Reserve banks have successfully withstood the severest test since their creation.

"There is a general appreciation of how thoroughly business and banking are interwoven. So it is with especial significance that we study the banking situation and find the country's financial outlook unmistakably improved."

As the most serious unsettling influence on business, Sisson spoke of "acute political and financial unsettlement existing abroad."

Discussing business factors, Sisson listed an improved

bond market, credit relief measures, steadiness in electric power consumption, inflow of gold into the United States, low inventories, decline in banking and commercial failures, increase in factory employment, excess bank reserves, decline in money hoarding and the reparations compromise at Lausanne.

"The existence of such a strong group of favorable influences has not been present at any other time during the depression," Sisson said.

### Statement on Sales Note

The Association of Cotton Textile Merchants of New York, through its secretary, W. Ray Bell, makes the following statement concerning the Uniform Salesnote Clauses agreed upon by the Textile Converters' Association, the Textile Brokers Association, Inc., and this Association:

"There were numerous meetings of the committees of these three associations at which these clauses were discussed. Final agreement was reached at a meeting held on March 15, 1932. The clauses were then drafted by the committee this association and submitted to Louis F. Hall, president of the Textile Converters' Association.

"Under date of April 7, 1932, the chairman of our committee received the following letter from the Textile Converters' Association:

"Pursuant to the suggestion of Mr. Hall and Mr. Lauten, we send you herewith copy of uniform salesnote clauses this day approved of by the board of directors of this association.

"Very truly yours,  
(Signed) "Samuel M. Fisher,  
"Secretary."

"Upon receipt of this letter and similar approval from the Textile Brokers Association, the clauses were put in printed form reciting the approval of all three associations, published in the daily press and have been generally accepted. Furthermore, it has been the consensus of opinion that the uniform salesnote, of which they are a part, has simplified and quickened negotiations between buyer and seller, accomplished economy of time and money, and promoted trade to the benefit of the industry as a whole.

"If the Textile Converters' Association now finds these clauses unsatisfactory, we shall be more than glad to discuss them with a properly accredited committee from that association at any time."

### New Atwood Booklet

The Atwood Machine Company, Stonington, Conn., has just issued a new booklet which illustrates and briefly describes the principal items in the complete line of Atwood silk and rayon throwing machinery.

Among the items covered are "Stonington" Winder, the world-famous "5B" Double-Twister, "Monarch" Twister, "Utility" Twister, "Advance" Redraw, Atwood Wire Swifts, various types of "5B" Feed Rolls, the "Ball Top" Spindle with maximum oil capacity, repair parts and accessories.

This booklet should be useful to throwsters interested in learning the principal features of various Atwood machines. More complete and detailed information on specific machines is available in individual catalogs.

## Boiler Efficiency, Steam Turbines, and Heating Systems

(Continued from Page 12)

was used commercially, and widely so, in two sister ships built by the Clyde Line, known as the "Lusitania" and the "Mauretania." They were the first ships of any size which adopted the turbine drive. One of those ships is operating today; the other one, perhaps, is at the bottom of the sea, having brought about such contention that it put two countries into war.

The boilers did not take on such definite shape as did the turbines until later, and it has only been in the last few years that there has been radical change in the design of boilers. Going back to the history of the boiler, beginning with the Stephenson locomotive, we find that there was very little done either in England or in this country until late in the nineteenth century with the boilers. They were more or less left to take care of themselves. In fact, one of the old pumping stations of the City of Philadelphia used a stove-type boiler—a wood stove-type boiler—to drive its pumping engine for a good many years. It was not until 1876, when the Centennial was in session in Philadelphia, that a few engineers got together and defined that which we call a "boiler horsepower." Let me say this: that is a misnomer from beginning to end. The boiler performs no work; it only evaporates water. That term is used in the engineering profession very little today. What is a "boiler horsepower?" It is the evaporation of a certain quantity of water during a certain time from a certain temperature into steam of a certain pressure. The definition was formulated after an investigation made by engineers back in 1876—and they had some good engines at that time, because Corliss had built his four-valve engine back in 1849. They found the average type of engine would consume about 30 pounds of steam for each horsepower it generated for a period of one hour; therefore the engineers decided the most feasible way to set up a definition for a boiler horsepower would be to put it on the basis of the steam consumption of the engine. That is logical. They made further investigations and found that the steam was made at approximately an average pressure of 70 pounds gage. That is a little over fifty years ago, and that was a high pressure at that time. So they used that pressure as their basis. Then they investigated further and found that the average temperature of the feed water (that is, the water that went into the boiler) was about 100 degrees F. So they compiled the definition, which goes as follows: A boiler horsepower is the evaporation of 30 lbs. of water per hour from a temperature of 100 degrees F. into steam at 70 lbs. pressure.

In trying to compare the performance of one plant with another, they found that the pressure was not the same for all, the feed water was not the same, so they had to work it back to an equivalent basis; and a little later the engineers set up what we call an equivalent of that on the heat-value basis. The unit for heat is the B. T. U., or British Thermal Unit, which is, briefly, that amount of heat which will change one pound of water one degree F. The heat equivalent is 34.5 lb./hr. "from and at" 212 degrees F.; that is, the evaporation of water at 212 degrees into steam at 212, or the condensation of steam at 212 into water at 212. That is the definition that was originated in 1876, just a little over fifty years ago, for a boiler horsepower. That was on an evaporative basis.

But the builder of the boiler had to have some way to rate his boiler, in order to sell it. He found out that

about 10 square feet of heating surface would evaporate the 34 lbs. of water per hour, so he began to build that into his boiler. The heating surface is the surface with water on one side and hot gases on the other. So you see you have two definitions there, not alike, one based on square feet of heating surface, and the other on evaporation. Now, what we are after is the number of pounds a boiler will make an hour. The steam consumption has been reduced to far less than 30. We do not have to have that basis on which to compare it.

Now, something about size and capacities. The first boilers that were built were not even rated. We did not know how to rate them until about 1876, when they began to rate them on the evaporative basis. Then the builders began to rate them on the square-feet-of-heating-surface basis. Those two methods paralleled one another for forty or fifty years, without much variation. Just a few years ago the Steam Piston Corporation built a boiler with about 1980 square feet of heating surface, which would give about 198 H.P. rating. They set up that boiler, and it developed on test just a little bit over 3000 H.P. on the evaporative basis, performing at 1500 per cent of its rated capacity. So you can readily see that the evaporative capacity of a boiler and the square feet of heating surface do not vary directly; they are functions of one another. But the thing which does count is the rapidity which had the heated gases can be transferred through the tubes into the water, so it is a heat-transfer problem. That being the case, we have found that the specific shape or type of construction has very little to do with the efficiency of the boiler, but the thing which has more to do with it than anything else is free circulation in the boiler and free circulation of hot gases around the boiler; that counts more than shape or type or even size. The thing that has improved boiler economies more than anything else in the last twenty to twenty-five years is knowledge of combustion and the correct setting of a boiler with reference to the burning fuel. That has given us high efficiencies.

It has also been learned that the efficiency of a boiler remains practically constant over a wide range of capacity. For example, a 1338 H.P. boiler, burning powdered coal, shows efficiencies of 84 per cent at 100 per cent rating and 81 per cent at 250 per cent rating. A 600 H.P. boiler, oil fired, has an efficiency of 83 per cent at rating and 80 per cent at 250 per cent of rating. An 1890 H.P. boiler using bituminous coal shows efficiencies of 80 per cent and 78 per cent at rating and 250 per cent rating, respectively. Where we run boilers around 80 per cent efficiency, over a wide range of capacity, they give very good results. A few experimental boilers have gone higher. We find that the efficiency is dependent upon combustion conditions, not upon size and shape of boiler or type of construction. It is more dependent, however, upon the cleanliness of the boiler, both inside and outside, than on the shape and size. If you have dirty tubes, with soot on them, inside or outside, or have dirty boiler walls on the inside, due to the deposit of mud or any sediment which settles from the water, it is difficult to get the heat transmitted through the soot, on the one side, to the metal and inside on the other, and leaves the heat to go up the chimney with the smoke or gases. If the owners of some of our mills could actually see the dollars that are flying out the top of their chimneys, they would change conditions. They may go in and see a boiler with cracks in the walls, but that does not mean much to them. The thing they are looking for is reduction in the use of coal; they do not want to buy much

(Continued on Page 24)



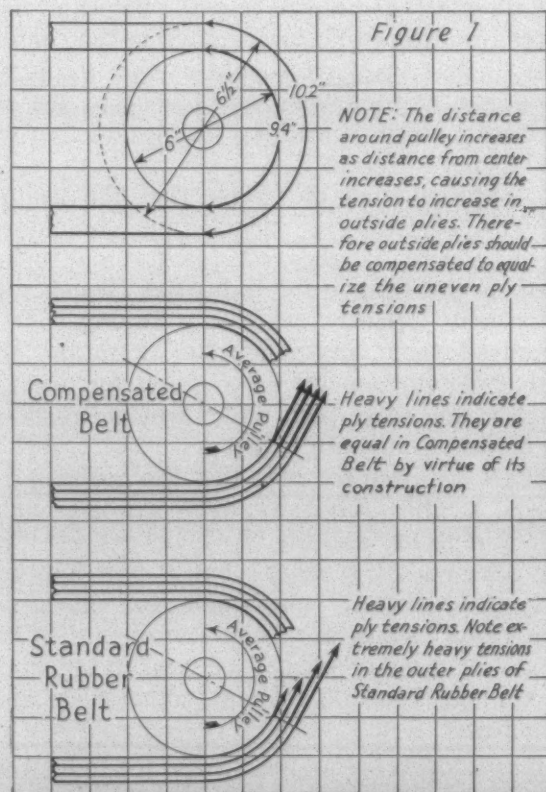
# NEWS

## a LOW TENSION Rubber Belt

*Compensated*  
PAT. APPLIED FOR

Manhattan engineers—the originators of Condor Belts—announce a new advanced type of transmission belting—the Compensated Belt.

Due to its special, compensated features (patents applied for), the belt performs best at 50% lower tension—resulting in longer bearing life, smooth and trouble-free running, and double the overload capacity of standard rubber belt.



These diagrams are self-explanatory—study carefully

We cannot urge you too strongly to investigate fully the Compensated Belt. We firmly believe industry will soon acclaim it, as many experts are now doing, as the greatest single advancement in rubber belt construction yet announced.

*Your jobber can supply you*

### 10 Advantages of Compensated Belts

1. Longer fastener life.
2. Higher efficiency when run slack.
3. Higher efficiency on small pulleys.
4. Freedom from ruptures in outside ply.
5. Freedom from wear on pulley side.
6. Freedom from ply separation.
7. Double the overload margin of safety.
8. Higher efficiency under all running conditions.
9. Reduced bearing, shafting, and hanger troubles.
10. Material reductions in belting "costs".

The Manhattan Rubber Mfg. Division of Raybestos-Manhattan, Inc.  
Executive Offices and Factories, Passaic, New Jersey

# SOUTHERN TEXTILE BULLETIN

Member of

Audit Bureau of Circulations and Associated Business Papers, Inc.

Published Every Thursday By

CLARK PUBLISHING COMPANY

Offices: 118 West Fourth Street, Charlotte, N. C.

DAVID CLARK	Managing Editor
D. H. HILL, JR.	Associate Editor
JUNIOUS M. SMITH	Business Manager

## SUBSCRIPTION

One year, payable in advance	\$2.00
Other Countries in Postal Union	4.00
Single Copies	.10

Contributions on subjects pertaining to cotton, its manufacture and distribution, are requested. Contributed articles do not necessarily reflect the opinion of the publishers. Items pertaining to new mills, extensions, etc., are solicited.

## Your Equipment

As we approach the end of the year and, if we are correct in our belief, the end of the depression, every cotton mill should know whether or not its equipment can be so changed as to materially decrease its cost of production.

If the worst of the depression has passed, improved equipment will enable a mill to take advantage of the demand for goods which in our opinion will some day exceed the possibilities of the production of existing spindles and looms.

If the depression is to continue the decrease in cost of production will enable some mills to meet competition and to survive whereas old equipment may ultimately prove too great a handicap.

In many cases shops are willing to sell new equipment upon the basis of payment being made for same in installments and the saving in production cost will each month take care of the installment.

We have heard recently of several mills that have replaced obsolete equipment and are meeting payments on the new machinery out of savings effected in their operations.

Even if the manager of a mill is uncertain about the advisability, at this time, of expending funds or making obligations incident to improved equipment, he does owe it to his stockholders to make inquiries relative to the cost of improved equipment and the reductions in cost which can be derived from same.

Such information relative to every department of the mill should be carefully compiled and available for consideration at the proper time which time may come earlier than is now expected by many.

## Their Master's Voice

Our attention has been called to the following statements published in the Daily Tar Heel, the students publication of the University of North Carolina:

Representing the League of Industrial Democracy, Mary W. Hillyer, manager of the society's lecture series, will deliver an outline of the organization's policies and plans in Gerrard hall tomorrow night.

It is the object of this society to provide education for a new social order based on production for use and not for profit. With this end in mind, it has sponsored a lecture series which Miss Hillyer will describe tomorrow evening. Among the subjects treated in the lecture circuit program are: the literature of revolt, America in an interdependent world, socialization of credit, and public utilities and public ownership.

After the meeting, which was also attended by professors from Duke University and N. C. College for Women, was held, this statement appeared:

At the meeting yesterday in Gerrard hall, plans were discussed for a series of lectures sponsored by the League for Industrial Democracy.

The movement to bring the lecture series to the University has been approved by the Y. M. C. A. cabinets, Amphoterathan Epsilon Phi Delta, and the Di and Phi societies.

Care was taken not to give the names of any of the professors who participated in the conference; in fact, we have sought in vain to obtain the names of professors who belong to the organization which is working for "production for use but not for profit."

It appears from the above that the lecture series, which last year included the communist negro Langston Hughes, was planned and supervised by the League for Industrial Democracy, which was formerly called the Intercollegiate Socialist League, and has for its motto and objective "production for use but not for profit," which is the exact plan under which Russia is attempting to operate today.

There has been the idea that the radical professors at the University of North Carolina, Duke University and the N. C. College for Women selected the speakers, but it now appears that "their master," the League for Industrial Democracy, sends a special representative to dictate what lecturers shall be used to influence the students towards atheism, communism and socialism.

In an address before the League for Industrial Democracy, Paul Blanshard, their field secretary, said:

Our hope is in the next generation of workers. We must educate the young. We must peg into the minds of the young while they are plastic. We must *bring to the colleges* the most provocative speakers obtainable.

From a pamphlet recently mailed to students



by the League for Industrial Democracy (formerly Intercollegiate Socialist League) we quote the following extracts:

Forums, with speakers from the faculty, student body, or community; should be held frequently, and should be well advertised. League for Industrial Democracy staff lecturers—Karl Borders, Paul Blanshard, Mary W. Hiller, Harry W. Laidler, Paul Porter, Norman Thomas—visit each year every section of the United States. Write to the League for Industrial Democracy national office to arrange speaking dates.

The League for Industrial Democracy can help you with outlines of a study course on the history and theory of socialism and allied movements.

Radicals can't be exclusive. Our numbers are small but our aims are great. Your club should have a squad of speakers to explain these aims—to young people's church groups, women's clubs, high school groups, street corner crowds.

The R. O. T. C. is forging the emotional armaments for the next war. Military mentality has no place in forward-looking education. League for Industrial Democracy students in scores of colleges have campaigned against military drill.

Student members of the League for Industrial Democracy have been in the thick of the miners' struggle in Harlan County, Kentucky, and in West Virginia. League members at the University of Illinois using a "white list" of the American Federation of Full Fashioned Hosiery Workers, led an effective campaign against student purchases of sweatshop hosiery.

They send to the University of North Carolina, Duke University and N. C. College for Women their representative who dictates the list of lecturers to be presented to students and a group of professors meet and pay heed to their "master's voice."

A representative of the organization which made these statements dictated the list of those who would lecture this year at the University of North Carolina, Duke University and N. C. College for Women, just as last year they ordered that the negro Langston Hughes should be heard and entertained.

The Y. M. C. A. at the University approved what its "master" dictated, which is easily understood when it is known that the Y. M. C. A. at the University of North Carolina, Duke University and N. C. State College, each, some time ago severed connection with the Y. M. C. A. organization of North Carolina and now take orders from a New York Y. M. C. A. organization which has a sub-office in Atlanta.

Last June the manager of the Atlanta office boasted to us that he was a socialist.

Things have come to a great stage in North Carolina when an organization which is openly radical and socialistic and has for its motto "Production for use but not for profit" can send its representatives to North Carolina to dictate what lecturers shall appear before the students in our colleges.

## Buying Opportunities Foreseen

H. Hentz & Co., of New York, were one of the stock market firms who advised against buying during the upturn last September, now see the present as containing opportunities for buying.

In their last weekly letter they say:

We are likely to pass through another very dull month in the financial markets and, in the absence of any stimulating developments, the market may drift to lower levels. However, we are definitely sanguine on the future and believe that the coming year will witness a gradual reconstruction. It may be slow and not without its periods of discouragement, but the economic cycle is due to swing back and with energetic and sound leadership, the dawn of a new era will inevitably rise.

Our advice to clients, therefore, is to avail themselves of buying opportunities this month. We believe that the foundation of fortunes may be laid during the next sixty days. It may well be the most attractive period for investment and speculation in many years to come. Purchases should be made on a scale down.

## Lady Astor Misrepresents

Lady Nancy Astor, born in Virginia but now a member of the British Parliament, said, this week, in an address before the National Consumers League in New York.

Children laboring 12 and 14 hours in the Carolinas produce so cheaply that respectable textile unionists in Manchester cannot meet the mark and are being ruined by American labor.

Lady Astor seems to have joined the ranks of those who indulge in loose talk.

Both North Carolina and South Carolina have 55-hour laws and both prohibit the employment of children under 14 years of age. In North Carolina those between 14 and 16 years of age can not be employed exceeding 8 hours.

## More Extravagance

We note the following newspaper dispatch from Washington, D. C.:

Dedicatory addresses by President Hoover and spokesmen of labor and employees, attending the laying of the corner-stone for the new Department of Labor Building in Washington, D. C., will be broadcast Thursday, December 15.

Following the erection of an \$18,000,000 Department of Commerce building for which there was no real need, they are now to erect at the cost of many millions a Department of Labor building for which there is absolutely no need.

If all the unnecessary employees of the U. S. Department of Labor were discharged they could close three-fourths of the present building.

## If It's Made of Paper Send Us Your Order

Cloth Winding Boards  
Jacquard Board—Beaming Paper  
Toilet Tissues  
Twines—Wrapping Paper—Boxes, etc.

**Dillard Paper Co.**  
Greensboro, N. C.



**Lockwood Greene Engineers, Inc.**

*Plans—Specifications—Reports—  
Appraisals—for Industrial Plants*

NEW YORK

BOSTON

SPARTANBURG



### DARY TRAVELERS

If it's a DARY Ring Traveler, you can depend on it that the high quality is guaranteed—that the weight and circle is always correct, and that all are uniformly tempered which insures even running, spinning or twisting.

Ask for Prices

### DARY RING TRAVELER COMPANY

311 Somerset Ave. Fred H. Dary, Mgr. Taunton, Mass.  
JOHN E. HUMPHRIES Sou. Agents CHAS. L. ASHLEY  
P. O. Box 843 P. O. Box 720  
Greenville, S. C. Atlanta, Ga.

### Business Stationery

Printed to order on Standard Bond Paper.  
Letterheads, Statements, Envelopes, Invoices, Circulars, Cards.

1,000	\$2.00
5,000	6.75

Any job quoted on receipt of information.  
Send sample for estimate.

**DAVID NICHOLS & CO.**

Kingston, Ga.

## BULLETIN Classified Ads

Bring Results at Low Cost

Make Your Wants Known Through  
This Medium

## MILL NEWS ITEMS

RED SPRINGS, N. C.—The Charles Mills have recently completed installation of one high speed warper and creel, also one comber.

OAKBORO, N. C.—The Oakboro Cotton Mills are installing a complete unit for softening water.

OAKBORO, N. C.—The Oakboro Cotton Mills have recently completed installation of one 6-cylinder, 360 H.P. Diesel engine for operating their plant.

VALDESE, N. C.—The office of H. C. Cline, contractor, estimates construction work on the \$25,000 extension on the Pilot Full Fashioned Hosiery Mill at Valdese will be finished within the next ten days. About fifteen new machines will be installed and between 100 and 125 operators added to the force.

NEW BERN, N. C.—With the recent addition of 45 new employees at the Cohen-Goldman sewing rooms here there are now 500 persons at work for this company in New Bern, it has been learned from Frank M. Girton, manager.

When Mr. Girton came to the city several years ago to take charge of the sewing rooms for his company, there were only 67 employees here.

CHATTANOOGA, TENN.—Bryan Hosiery Mills is having installed several 45-gauge high speed Einsiedel-Reiner hosiery machines.

The machines are said to be the most complete lace machines installed in an American mill. The lace attachments can move over a wider range of needles, and can be used on merchandise which has required jacquard machines in the past.

RICHMOND, VA.—An amendment to the charter of Hampton Looms of Virginia, at Bedford, Va., of which C. Edwin Webb is president, reduces its actually issued and outstanding capital stock and changes its maximum authorized capital stock from \$800,000 common and preferred and 2,000 shares of no par value common to 3,000 shares of no par value common and \$700,000 common and preferred. John P. Ketzer, 907 Fidelity Philadelphia Trust Building, Philadelphia, Pa., obtained the amendment.

KINGSPORT, TENN.—Another large expansion program is under way at the Tennessee Eastman Corporation here, which is estimated to cost about \$2,000,000.

The improvements include two large buildings, and although little information is available, due to the close guarding of the work and the refusal of officials to comment, unconfirmed reports say that the new mills, which are a unit in themselves, will manufacture a special kind of acetate yarn and plastic cellulose to be used in the manufacture of shatter-proof glass.

The steel work for one eight-story plant building and one seven-story plant building is already up and scores of brick masons are working on the walls. The eight-story building is apparently a twin of the building erected last year and which is now used for the manufacture of yarn.

Reports also say that further expansions are planned.



## MILL NEWS ITEMS

GREENSBORO, N. C.—The Southern Webbing Mills, manufacturers of elastic for overall suspenders and other apparel, reports that the overall elastic department of the mills is operating day and night on this line in order to fill the orders coming in steadily from plants in the United States and Canada for the past several months. The company supplies 75 per cent of the webbing used by 350 overall manufacturing plants in the United States and Canada, according to W. H. Cocke, superintendent.

BIRMINGHAM, ALA.—Completion of the Gardiner-Warring Company, manufacturers of knit underwear, at Florence, Ala., including a third story to one of the buildings in which the cutting department is now housed, has made it possible to increase the number of employees of the plant. Upward of 700 people are employed in the industry. An addition to the warehouse of the plant now makes it possible to carry a large quantity of yarns and no apprehension at period is to be further experienced in having the raw material delivered.

WEST POINT, GA.—The West Point Manufacturing Company, which reported a net loss of \$398,613 for the fiscal year ended October 19, 1932, showed a drop in dollar volume of 20.5 per cent under the previous year, and a sales reduction in pounds of 7.5 per cent. Average operations for the year were 75 per cent of capacity.

The net loss of the company was attributed principally to operations during the first six months of the fiscal period, when a loss of \$331,476 was shown.

The balance sheet, as at October 19, last, shows current assets of \$3,580,452 and current liabilities of \$492,713, leaving net quick assets of \$3,087,738, against net quick assets at the close of the preceding fiscal year of \$3,258,889.

One of the important changes in the balance sheet is the reduction in the notes payable account of \$773,000. This account now stands at \$250,000. Only one dividend was paid during the year, directors voting to omit the quarterly dividends at the meeting held on March 11.

ANNISTON, ALA.—The annual inspection of the American Net & Twine Co. mill at Blue Mountain has just been made by Robert W. Barbour of New York and R. C. Webster of Boston, president and vice-president, respectively. The officials were pleased with the new unit, which has just been finished and machinery is being shipped for installation. The entire job represents an expenditure of about \$55,000. It is expected that it will be in operation early in the new year.

CHARLOTTESVILLE, VA.—The Albemarle Weaving Company will have a dye plant in operation in addition to the regular plant about the middle of January, it was announced by A. K. Landau, who took charge as manager of the company about a month ago. The capacity force will be about 200 men and women.

Mr. Landau said that machinery will soon be installed in the dye unit and that another warehouse is to be built. He estimated the total cost of the work at \$50,000. Work will be started on the one-story warehouse by the Wilson Construction Company of Richmond. It is expected that the building will be erected in about one week.

# Thank you

... mill owners for the enthusiastic response to the introduction of our Improved Breton Mineral Process Equipment (Patents Pending) exhibited as below at the recent Southern Textile Exposition, Greenville, S. C.



**BRETON  
MINEROL  
PROCESS**  
PATENTED

A method of conditioning for moisture control and lubrication to the fibre by spraying the raw stock with MINEROL.

**BORNE SCRYMSER COMPANY**  
17 BATTERY PLACE, NEW YORK

# Here are the Crucial Minutes

*... which the  
business paper  
helps to save*



"Mr. Smith," calls the secretary. The first of a line of waiting salesmen, hurriedly collecting hat and sample case, enters the buyer's office.

A ground-glass door closes behind him. The other men shift, recross their legs and settle down to wait their turn. It won't be long now.

And it won't! For the average time given to salesmen is brief—heart-breakingly brief, sometimes. In retail stores it varies between 4 minutes in department stores and 21 minutes in furniture stores, with an average for all lines of 12 minutes per interview. In industrial concerns it is scarcely longer.

Yet within those few minutes every actual sale must be consummated. Here, within the walls of one room, across one desk, and in the space of a few hundred seconds are focused the entire efforts of management, produc-

tion, advertising—to stand or fall on the result of personal salesmanship. Here are the crucial minutes when a man must sell.

And because these selling minutes are so few, so precious, it is important to save them for actual selling, to free the hands of salesmen for the important work which can only be done face to face with the buyer.

It is here that the business paper is of untold value to the manufacturer. For it reaches in advance the man behind the ground-glass door. In its pages can be said beforehand everything that must be said as a preliminary to effective personal selling; to get introductions and explanations out of the way; to create friendships and reputations; to clear the decks for two-fisted selling.

Because the business paper of today deals so authoritatively and constructively with the problems of its industry, profession or trade, it not only passes through the ground-glass door, but it is read, thoroughly and attentively, by the man who constitutes the manufacturer's most important single objective. His interest makes the business paper the key to saving crucial selling minutes.



THIS SYMBOL identifies an ABP paper . . . It stands for honest, known, paid circulation; straight-forward business methods, and editorial standards that insure reader interest . . . These are the factors that make a valuable advertising medium.

This publication is a member of the Associated Business Papers, Inc. . . . a cooperative, non-profit organization of leading publications in the industrial, professional and merchandising fields, mutually pledged to uphold the highest editorial, journalistic and advertising standards.

+ + + + +

**THE ASSOCIATED BUSINESS PAPERS, INC.**  
TWO-NINETY-FIVE MADISON AVENUE · NEW YORK CITY



## Methods of Getting Co-Operation in Accident Prevention Work

(Continued from Page 8)

pared in advance. They should have high educational value and should be of sufficient variety and brevity to retain the active interest of the members. Generally speaking, these programs should include reports of accidents for the previous period, discussion of individual accidents with respect to contributing causes and circumstances, and suggestions as to how similar accidents may be avoided.

By having all serious accidents thoroughly investigated by the safety committee, the foreman of the department in which the accident occurred, and by the company official in charge of safety work, the employees will be impressed with the importance which the management attaches to accident prevention work. Complete reports of such investigations should be prepared, after the employees involved have been interviewed, and copies of the report should be filed with the proper officials of the company.

While the safety committee should concern itself primarily with the correction of unsafe practices, it is very important that continuous attention be given to the physical conditions of the plant. This may be accomplished through regular inspection trips through the entire plant, either by the committee as a whole, or by a sub-committee appointed for that purpose.

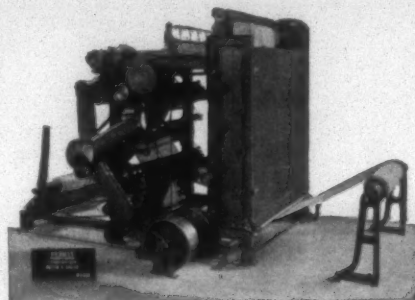
In order to be a safe employee, the worker must be well fitted physically to perform the duties to which he is assigned. This brings us to the decided value of physical examination before employment and the proper placement of employees. The physical examination should be of such a nature as to reveal any physical deficiencies or conditions that might make the employee susceptible to accidents of one kind or another.

In nearly every plant where organized safety work is a regular policy of the management, it will be found that there are definite rules and regulations to govern the employees in the performance of their duties in a safe and efficient manner. Of course, no general set of rules can be formulated to fit the needs of a group of plants even in the same industry, but such rules can be made to apply to each individual case. Strict conformity to safety regulations is absolutely essential to the success of an accident prevention program, and any infraction of a rule should be immediately followed by the proper discipline, even though an accident may not have resulted. A rule, unenforced, is worse than having no rule at all.

In my opinion, entirely too little effort is made to acquaint employees with the cost of accidents, and with the fact that the company, in the final analysis, must pay this cost. The average industrial employee knows that under the law, his employer must carry compensation insurance, so he immediately assumes that the insurance company pays the bill. As a matter of fact, in a great many cases his compensation for time lost as a result of an accident is paid direct to him by a check from the insurance company, and the doctor who treats him gets a check from the insurance company. It is natural, therefore, for him to reach that conclusion. Unfortunately, the attitude of industrial employees, as well as of the public, at large, toward insurance companies, is not a generous one, and there is usually a tendency to "stick" the insurance company if possible. Of course, we know the truth—that under the experience rating plan of compensation insurance, in the long run, the employer repays to his insurance company every dollar that has been paid

# HERMAS

## Fully Automatic Combination BRUSH and SHEAR



Removes all strings, trash, leaf, motes, etc., from the selvages, back, and face in one pass at high speed. Only 50% of former floor space required. Any number of knives or brushes. All standard widths.

### HERMAS MACHINE COMPANY

HAWTHORNE, N. J.

Southern Representatives  
CAROLINA SPECIALTY CO.  
Charlotte, N. C.

### A SIGN OF THE TIMES

## Lowest Holiday Railway and Pullman Fares Ever Made

Spend Christmas and New Year's at Home

Round Trip Tickets sold Good Going December 14 to 25, inclusive. **33⅓% REDUCTION**  
Return Limit January 9, 1933.

Round Trip Tickets sold Good Going December 23 to 26, inclusive. **46% REDUCTION**  
Return Limit December 27, 1932.

Round Trip Tickets will also be sold December 30-31, January 1-2. **46% REDUCTION**  
Return Limit January 3, 1933.

Round Trip Pullman Rates. **25% REDUCTION**

Holiday Tickets will be sold at all Agency Stations to all Stations on the Southern Railway System, and to many points on other Lines in the South.

Holiday Tickets are good on all trains in Coaches, also in Parlor or Sleeping Cars on payment of Reduced Pullman Charges.

Holiday Fares are also available to destinations in the East, North, West and Southwest.

Consult Ticket Agents

## Southern Railway System

out under his policy for compensation, medical expense, etc., and in addition he pays an extra amount of overhead cost of carrying the risk.

To briefly sum up the thoughts that I have tried to express to you, accident prevention is a moral, financial and economic responsibility of industry. As such it is a definite problem of management and should, therefore, be handled as a regular factor in production, with the necessary organization, personnel and machinery to insure its successful and efficient operation. Adequate educational methods must be employed to create a safety consciousness on the part of the employees and to make them realize the cost of accidents in money, men and efficiency. As a factor of production accident prevention is the overseer's responsibility and upon his co-operation and support will depend the co-operation of the employees and the success of the program.

### Boiler Efficiency, Steam Turbines, and Heating Systems

(Continued from Page 16)

coal. If they would make some study of conditions—the way the boiler is set, whether it is set high enough for the type of coal they are burning, etc.—they would begin to get better results, with the expenditure of only a small amount of money, if that money is mixed with intelligent investigation in the boiler room and in the plant. Wonderful results can be had from very little expense, if the money is mixed with the proper type of thinking.

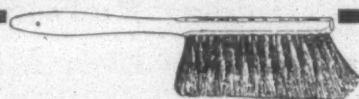
I should like to say a word or two about heating plants. It is right interesting to observe what we might say is the evolution of the heating plant from its beginning to the present day. The cave man had a heating plant, usually a pile of wood which would burn in his cave or tent. In the tent, usually, there was a hole in the top for the smoke to get out. As civilization progressed, it was con-

fined to an open fire, and chimneys were built. Then men decided that there was a little danger in the open fireplace, and that its efficiency was low, so they built the stove. That gave a little better results; they put the stove in the room they wanted to heat. Then someone got tired of having the stove in the room, or tired of bringing in wood and coal and taking out ashes, so someone thought of moving the stove to the basement and conducting the hot air to the rooms, and the first hot-air furnace was built.

With the development in the use of steam, we began to find that we could use steam for heating, and began to conduct the steam around. There is no particular patent on the steam plant. If we run the steam to the radiators in the same main which returns the condensate back to the boiler, we speak of that as a one-pipe system. If we convey the steam to the radiators through one pipe which is known as the steam main, and return the condensation through another line, we speak of that as a two-pipe system. So the development of the heating plant has come along from the open fire to the fireplace, then to the stove, then to the hot-air plant, and then to the steam plant. The steam plant has some advantages over the hot-air furnace.

The thing in which I think you would be interested is some of the combinations of boilers, turbines, and heating plants. In textile industry you have to do some heating and also have some process work. A good many mills generate their own power. Especially if you have any dyeing or sizing or anything of that kind to be done, you have some process work. What can be done? If we work toward a combination of boiler, turbine, process work, and heating plant all together, it is quite possible that you can generate the steam in the boiler, put it through the turbine, put it through the stages of the turbine and withdraw it—"bleed" it, as we say, or extract it—and use it for process work. That sort of turbine is called a bleeder turbine. The steam can also be used for steam heating or feed-water heating, or any combination of these. Cotton mills which generate their own power and also use steam for process work or heating can use an arrangement of bleeding where good economies can be had if a little investigation is made as to requirements of steam for the other purposes aside from power alone. You can turn the steam into your heating system and then finally return it back to the boiler. It might be profitable if you could return the condensation back to your boiler, for this reason: Every time you can raise the temperature of the feed water in your boiler plant about 12 degrees F., by using exhaust steam or flue gases, you can increase the efficiency of your plant about 1 per cent; that is, you are cutting down the coal you have to buy by about 1 per cent. In these days and times, of course, coal does not cost so much. Right now I am burning coal that costs five cents a ton at the mine—f.o.b. mine. But it costs \$3.10 a ton for the freight. Now, that is good coal, provided it is burned correctly and provided with the right equipment.

I should like to say, in connection with the coal, that a great many times the purchasing agent for your concern pays too little attention to the amount of ash on which he is paying freight and too little attention to the heat value of the coal. So many of us buy it by the pound and think of it in the pound; but you should think of it as the heat it will generate; you should think of it as to the ash content. For instance, if you buy coal which costs you (freight, coal, and all) \$4.50 a ton, and there is ten per cent ash in the coal, you are getting only 0.9 pound of combustible; and that means it is costing you \$5.00



Manufacturers and Repairers of  
**COTTON MILL BRUSHES**

Write for Prices and Estimates.

**GASTONIA BRUSH CO.**  
Gastonia, N. C.

### An Opportunity for Mill Executives or Superintendents

No doubt you are thinking of how to play Santa Claus to your employees with the greatest effect and at the least cost. We have the answer. You can also thereby help the agricultural producers in your territory.

We are assembling fine quality PECANS in this territory and preparing them for market and can make you an extra special value to be distributed to your employees at Christmas. Never have they been half so low in price and besides have the highest food value of any nut. Can supply you any amount and at unusual values. Something that will really make the children feel that Santa Clause has come. For our responsibility we refer you to any bank in Florence or any fruit and produce credit book.

**CAROLINAS COOPERATIVES CONSOLIDATED**  
Florence, South Carolina



a ton instead of \$4.50. To the railroad it makes no difference whether ash or coal is being hauled, but to the consumer it does make a difference. He should know something about the ash content per ton before he buys it. It might pay him to pay a nickel more a ton.

It is quite probable that there are cases of which you have direct knowledge where you can go back to a plant and find it is wasting a lot of hot water which could be turned into the feed-water channels and add to the efficiency of the plant by putting in this hot make-up water rather than cold make-up water. Quite likely there are many heating plants in your mills from which you do not recover even the condensation; it is just spilled out. That is not efficient; that condensation needs no purifying; it is pure feed water and should be used instead of pumping creek water into the feed line.

Sometimes we notice a great deal of noise when the heat is first turned on, and the chances are that the steam line has been put in without proper attention to levels, without the proper attention to grade. You can go back and grade your mains so that they will drain freely, cut out the knocking, and get better results. Just recently I had a case under my observation of a cotton mill over on Deep River. The man there was using steam of about 80 pounds to heat his mill but did not get very good results. I went down there and found out he was trying to lift a column of water there about thirty or forty feet. We cut that out for him and bled the steam from his turbine, and it is working all right—he doesn't use live steam at all. You can probably do the same thing or something similar if you go back and study your plant.

We have gone from the turbine of Hero's time, which was a plaything, to the big turbine in the State Line plant of the State Line Generating Company, at Hammond, Ind., which has a rated capacity of over 200,000 kw. in one unit. And there is one turbine in Hell Gate, in the City of New York, which will furnish one incandescent light to one million homes. There is one steam line in which the steam has a temperature of 825 degrees F. If you take off the cover and turn off the lights, you will see a red glow there, like a stick of red candy; it is not red hot, but it glows. We are running steam at that temperature; 750 degrees is a common temperature. A pressure of 1450 lbs. is a common thing in high-pressure plants. We have gone to units that will evaporate 1,250,000 pounds of water per hour. That is a lot of water. Those are big quantities. And the efficiencies have gone up, as I told you a while ago, to around 80 per cent, by studying the fuel, the proper combustion, and proper sizing of the boilers. The steam boiler will operate over a wide range at practically the same efficiency; the steam turbine will operate over a wide range at practically the same efficiency—much more so than boilers. That is why the steam turbine gives you better efficiency over a wide range than anything else, and that is why it is efficient to use.

It is true, I suppose, though sometimes I wish it were not true, that the dollar mark determines everything we try to do. In the commercial world the dollar is the dictator, and what we want to do is to try to save the dollar. The engineering profession has tried to co-operate in saving the dollar. It has to some extent replaced hand labor. We may have to go back to some hand labor in order to provide jobs. In one plant stokers were put in, and one stoker operates what it took ten men to operate. Why did we do it? To get rid of the men? No, but because we get better efficiency. But we have to think more about the humanitarian side; we want efficiency, but we do not want it at too great a sacrifice.

# THE

## Bowen

### Patented

## BEVEL EDGE

## TRAVELER

and

## VERTICAL

## OFFSET

## TRAVELER

*Give Ideal Traveler  
Performance and  
Quality Yarns*

Manufactured Exclusively by

**U. S. Ring Traveler Co.**

Providence, R. I.

Greenville, S. C.

Antonio Spencer, Pres.

Amos M. Bowen, Treas.

#### *Representatives:*

New England—Carl W. Smith

Middle Atlantic—Geo. H. Gilligan

Southern—Wm. P. Vaughan and

Oliver B. Land



MARK

#### *Note*

We have a direct wire to the WESTERN UNION. All wires are received at this office on the Western Union Simplex Printer, assuring prompt attention and quick service. When telegraphing us substitute the symbol W U X for our street address.

**A Traveler for Every Fibre**  
**For Spinning - - For Twisting**

## Aberfoyle Offers Novelty Yarns

Meeting a widespread and growing demand for novelty yarns and fiber mixtures, the Aberfoyle Manufacturing Company announces a range of novelties including crepe yarns, boucles, and softly twisted versions in all-durene, durene-and-rayon and durene-and-wool combinations. Seven distinct types are being offered and among these there are many variations.

The trade has indicated a strong desire for novelty yarns and mixtures, and an enthusiastic reception is promised these new developments. They offer an entirely new field for durene fabric constructions, since, by varying their weights, it will be possible to produce all classes of fabric from cheers to soft woolly-textured cottons.

In addition to technical and fiber variety, the new Aberfoyle yarns are presented in a broad range of colors and shades including monotonies, two-tone and multi-color combinations.

## Canada's Textile Trade Shows Marked Activity

"It is now apparent that the disappointing records of the major industries for mid-autumn production were largely offset by a burst of activity in the secondary industries, notably the textile trades," states S. H. Logan, general manager of the Canadian Bank of Commerce. "The sole exceptions to declining production in the major industries in October were in newsprint, which showed an increase of somewhat less than seasonal proportions, and in automobiles, chiefly for export. Steel production was but little more than half that of the preceding month and at two of three principal centers was negligible, while there was a decline in the lumber cut and in the output of some leading minerals. Railway freight traffic has dropped sharply since mid-September, after rising to a point above that of the corresponding period of 1931. On the other hand, there was an improvement in employment during the early autumn, a period when employment is usually either stationary or on the decline, and a smaller recession latterly than might have been expected; thus, the most recent Dominion Government employment report mentions that the drop in factory employment was not so great as in the late autumn of the three preceding years. This comparatively favorable showing is the re-

sult of the sustained production of consumption, rather than of capital goods.

"Continued large exports of wheat were of course a very important factor contributing to the satisfactory results of foreign trade. The overseas shipments of this product since the beginning of the "wheat year," August 1, total about 100 million bushels, this being over 50 per cent of world exports and about one-quarter of the Canadian wheat available for the foreign market. Canadian shipments of wheat to November 19 were 56½ per cent of total world shipments since the beginning of the present year.

# INDEX TO ADVERTISERS

Where a — appears opposite a name it indicates that the advertisement does not appear in this issue.

	Page		Page
Akron Belting Co. —A—	—	Hinde & Dauch Paper Co. —	—
Aktivin Corp. —	—	Houghton, E. F. & Co. —	—
American Cyanamid & Chemical Corp. —	—	Howard Bros. Mfg. Co. —	—
American Moistening Co. —	—	Howard-Hickory Co. —	—
Ashworth Bros. —	—	Hunt, Rodney Machine Co. —	26
Associated Business Papers, Inc. —	22	Hygrolit, Inc. —	—
Bahnson Co. —B—	—	H. & B. American Machine Co. —	—
Bally, Joshua L. & Co. —	28	Johnson, Chas. B. —J—	—
Barber-Coleman Co. —	2	Keever Starch Co. —K—	—
Barkley Machine Works —	—	—L—	—
Borne, Scrymser Co. —	21	Lockwood Greene Engineers, Inc. —	20
Briggs-Shaffner Co. —	—	—M—	—
Brown, D. P. & Co. —	—	McCord, H. M. —	28
Buffalo Electro Chemical Co., Inc. —	—	Manhattan Rubber Mfg. Div. of Ray-	—
Butterworth, H. W. & Sons Co. —	—	bestos Manhattan, Inc., The —	17
—C—	—	Marston, Jno. P. Co. —	—
Callaway Mills, Inc. —	1	Mauney Steel Co. —	—
Campbell, John & Co. —	—	Marrow Machine Co. —	—
Carolinas Co-operative Consolidated —	24	Morton Machine Works —	—
Celanese Corp. of America —	—	—N—	—
Charlotte Chemical Laboratories, Inc. —	—	National Aniline & Chemical Co., Inc. —	4
Charlotte Leather Belting Co. —	—	National Oil Products Co. —	—
Ciba Co., Inc. —	—	National Ring Traveler Co. —	29
Clark Publishing Co. —	36	N. Y. & N. J. Lubricant Co. —	36
Clinton Corn Syrup Refining Co. —	29	Nichols, David & Co. —	20
Corn Products Refining Co. —	—	—O—	—
Cotton-Textile Institute, Inc. —	—	Oakite Products, Inc. —P—	—
Crompton & Knowles Loom Works —	—	Parks-Cramer Co. —	—
Curran & Barry —	28	Perkins, B. F. & Son, Inc. —	—
—D—	—	—R—	—
Dary Ring Traveler Co. —	20	Rice Dobby Chain Co. —	35
Deering, Milliken & Co., Inc. —	28	Roy, B. S. & Son —	—
Dillard Paper Co. —	20	Royle, John & Sons —S—	—
Dixie Mercerizing Co. —	—	Saco-Lowell Shops —	—
Dixie Spindle & Flyer Co. —	—	Seaboard Ry. —	—
Dixon Lubricating Saddle Co. —	—	Seydel-Woolley Co. —	35
Draper Corporation —	9	Shamow Shuttle Co. —	—
Dronfield Bros. —	—	Sipp-Eastwood Corp. —	—
DuPont de Nemours, E. I. & Co. —	—	Sirrine, J. E. & Co. —	—
DuPont Rayon Co. —	—	Smith, L. C. Bobbin Works —	—
Durene Association —E—	—	Solvay Sales Corp. —	—
Eaton, Paul B. —	26	Sonoco Products —	—
Eclipse Textile Devices, Inc. —	35	Southern Ry. —	23-29
Hotel Edison —	—	Southern Spindle & Flyer Co. —	—
Emmons Loom Harness Co. —	—	Stanley Works —	—
Enka, American —F—	—	Steel Heddle Mfg. Co. —	—
Fidelity Machine Co. —	—	Stein, Hall & Co. —	—
Firth-Smith Co. —	—	Stevens, J. P. & Co., Inc. —	28
Foster Machine Co. —	—	Stone, Chas. H. —T—	—
Benjamin Franklin Hotel —	17	Terrell Machine Co. —	—
Franklin Process Co. —G—	—	Textile Finishing Machinery Co. —	—
Garland Mfg. Co. —	—	—U—	—
Gastonia Brush Co. —	24	U. S. Bobbin & Shuttle Co. —	—
General Dyestuff Corp. —	—	U. S. Ring Traveler Co. —	25
General Electric Co. —	—	Universal Winding Co. —V—	—
General Electric Vapor Lamp Co. —	—	Veeder-Root, Inc. —	—
Gill Leather Co. —	—	Victor Ring Traveler Co. —	—
Goodyear Tire & Rubber Co. —	13	Viscose Co. —W—	—
Graton & Knight Co. —	—	Waltham Watch Co. —	—
Greenville Belting Co. —H—	—	Washburn Printing Co. —	36
Halton's, Thomas Sons —	—	Wellington, Sears & Co. —	—
Hart Products Corp. —	—	Whitin Machine Co. —	3
Hermas Machine Co. —	23	Whitinsville Spinning Ring Co. —	35

## PATENTS

Trade-marks, Copyrights  
A former member of the Examining  
Corps in the United States Patent  
Office.

### PAUL B. EATON

Registered Patent Attorney  
Offices: 1408-T Johnston Bldg.  
Charlotte, N. C. Phone 7797  
434 Munsey Building  
Washington, D. C.  
Also Winston-Salem, N. C.

## RODNEY HUNT

Textile Wet Finishing Machinery  
Water Power Equipment  
Rolls—Wood, Metal, Rubber

RODNEY HUNT MACHINE COMPANY  
35 MILL STREET ORANGE, MASS.



## Some Reminiscences on the Textile Industry

(Continued from Page 7)

goods, and this probably was the most practical means of demonstrating to Southern manufacturers of colored fabrics the necessity of doing their own finishing. Since then the finishing of the better grades of fabrics has received great impetus and has resulted in the establishment of a number of modern and successful bleaching, dyeing, printing and finishing establishments.

Many of our Northern friends have moved down here and have cast their fortunes and careers with us and they and the textile schools and native talent have aided greatly in the development of this important branch of the textile industry. We have room for them all here.

We also need to become more painstaking, more scientific and to apply more serious efforts to research work to the end that our industry may be more thoroughly and successfully carried on.

It is a long call between the hand painting of the Hindoos and block printing methods of producing colored figures on textiles as practiced by the early Europeans. It is an even longer stride between crude block printing and the modern ten-color Duplex printing machines, using fast, bright vat colors and running at 50 to 100 yards per minute, producing fabrics of the highest quality and embodying the most beautiful reproductions of art. It is machines of this character which have made it possible to manufacture fabrics that can be sold at only a few cents a yard, so that enough can be bought by the American girl for less than a dollar to make a dress, which would put to shame the robes and gowns of queens of the royal blood produced centuries ago, under conditions of serfdom and servitude, which stifled human ambition and vision.

The next serious problem which those coming after us will have to face is where are we headed for? What does the future hold in store for our industry?

That future is vaguely concealed from our view by a thin curtain, woven from the silken threads of applied science in that golden loom of unsatisfied research, and with that undaunted shuttle of human perseverance, bleached in the blazing sun of intelligence, skill and honesty, and colored with that amazing and delicate hue of an unbounded ambition.

### Students' Inspection Trip

Students in the Textile School of North Carolina State College who are specializing in textile chemistry and dyeing, made an inspection trip during the past week. On Friday they visited several mills in Burlington, N. C., and on Saturday visited the Proximity Mill and Print Works in Greensboro, and attended the annual meeting of the American Association of Textile Chemists and Colorists.

The students were accompanied by Dean Thomas Nelson and Professor A. H. Grimshaw, of the Textile School.

The Textile School is one of the two schools in the country that has a Junior Section of this Association.

Students who made the trip were as follows: C. T. Anderson, Norfolk, Va.; K. A. Bridgers, Griffin, Ga.; S. H. Caldwell, Concord, N. C.; L. G. Derrick, Newberry, S. C.; B. D. Farmer, Wilmington, N. C.; A. C. Hayes, China; M. C. Hunter, Charlotte, N. C.; E. May, Jr., Burlington, N. C.; J. A. Porter, Rockingham, N. C.; W. G. Sloan, Wilmington, N. C.; C. E. Stout, Asheboro, N. C.; D. Torrence, Petersburg, Va.; J. H. Troutman, Statesville, N. C.; Reid Tull, Raleigh, N. C.; Boris Uzunoff, Bulgaria.

## Third Edition of PRACTICAL LOOM FIXING

By Thomas Nelson

Dean of Textile School, N. C. State College

Completely Revised to Cover Most  
Modern Equipment, With Chapters  
Devoted to the

### WEAVING OF RAYON and RAYON LOOMS

This book, written by a recognized authority, is accepted throughout the textile industry as the standard work on this important subject. Previous editions have been used for many years as text books in schools and colleges, and sales to mill men both here and abroad, have been most gratifying.

PRICE: \$1.25

Clark Publishing Co.

CHARLOTTE, N. C.

Have You Some Equipment You Want to  
Dispose Of?

**SELL IT**

Through A

**Classified Ad**

In The

**Southern Textile Bulletin**

Read in Nearly All Textile Mills in the South

## SELLING AGENTS *for* SOUTHERN COTTON GOODS

### Deering, Milliken & Co.

Incorporated

79-83 Leonard Street

New York

99 Chauncey St., Boston

223 Jackson Blvd., Chicago

### CURRAN & BARRY

320 Broadway

New York, N. Y.

DOMESTIC

EXPORT

### MERCHANDISING

JOSHUA L. BAILY & Co.

10-12 THOMAS ST., NEW YORK

### H. M. McCord

100 East 42nd Street, New York City  
Ashland 4-0345

161 Devonshire St.  
Boston  
Liberty 5943

Commercial Trust Bldg.  
Philadelphia  
Rittenhouse 2185

*Southern Representative*

W. G. Pattison  
Tel.—Charlotte—2-0264

## COTTON GOODS

New York.—The cotton goods markets were active last week, particularly in unfinished lines where sales showed an increase. Sales of print cloths were estimated to exceed 10,000,000 yards and there was further good business in carded broadcloths. Prices were firmer and business offered at the old prices was declined.

More confidence was felt in the market during the week. Despite the bearish tone of the crop report, cotton did well and cloth business that was checked when the report was first announced, began to pick up again a few hours later. Buyers evidently feel that mills are determined to control production and prices more rigidly than has been the case in the past. Additional assurances from many mills that they would operate only on orders and refuse to sell at a loss, were noted during the week.

Although they were unwilling to follow advances for print cloth shipments in 1933, buyers were busy covering December requirements, and these sales, together with future sales on goods for which no premium was asked, brought the total up to a respectable volume. Sales for the week, it was said, were well in excess of production, and conservative estimates placed the total around 40,000,000 to 50,000,000 yards, for coarse yarn gray goods as a whole, the bulk of this being in print cloths and carded broadcloths. Further strength in raw cotton, which was reported to be attributable to covering on the part of mills and other interests which had stayed short over the crop report, helped the cloth market, to the extent that mills were determined in their efforts to get a premium for futures. Broadcloths were more active, and some advances were paid, although others were merely moved up in asking prices. Sheetings were soft and not generally active. Some business had been put through in twills and sateens, and some constructions of narrow drills were active.

Print cloths, 28-in., 64x60s	2½
Print cloths, 27-in., 64x60s	2¾
Gray goods, 38½-in., 64x60s	3¼
Gray goods, 39-in., 68x72s	3½
Gray goods, 39-in., 80x80s	4½
Brown sheetings, 3-yard	5¾
Brown sheetings, standard	6
Brown sheetings, 4-yd., 56x60s	4½
Tickings, 8-ounce	11½
Denims	10½
Dress gingham	10½-13
Standard prints	7½
Staple gingham	6½

### Constructive Selling Agents for

Southern Cotton Mills

J. P. STEVENS & CO., Inc.

44 Leonard St.  
New York City



## YARN MARKET

Philadelphia, Pa.—The yarn situation was better last week. Prices were firmer under the influence of somewhat larger contract buying that developed late in the week. Yarn available at concessions was much harder to locate than has been the case for some time. A number of good sales for delivery next year were reported. One of the most encouraging features of the situation was the number of spinners who stated that they will operate on stocks. It is believed here that stocks are going to hold on a healthy basis and that mills are going to operate very close to orders. The decline in prices appeared checked, although there was considerable irregularity due to the situation that has developed by falling prices.

An active movement of yarn before the end of December, from spinners to consumers, is indicated by numerous requests received from customers by local yarn houses, for shipments to reach the consuming mills during the week beginning January 2. Shipments will be made by spinners during the week beginning December 25, it is said, as this will serve two purposes. The yarn will not figure in the spinners' inventory and as the bills will be dated January 1, will not enter into the consumers' inventory. Many million pounds of yarn are expected to be in transit during the holiday period. Locally, it is stated, this movement will probably be the largest of its kind. New business and prices were not affected by the surprisingly large total shown in the Government's cotton reports. Firmness of cotton was accepted by yarn men as an encouraging sign for the future. That leading local houses plan carrying of larger yarn stocks in 1933 was shown by removals of several firms to new quarters giving enlarged warehouse facilities.

Carpet yarns moved during the week in the largest volume in many months. In some of these dealings, it was reported the price went as low as 10¾ cents a pound. There was a blanket contract placed late in the week covering 150,000 pounds of carded and combed peeler knitting yarns for an up-State, Pennsylvania buyer. This business also was taken at a low figure, with most of the houses here bidding.

Southern Single Warps			20s		
10s	13	a	40s	25	a
12s	13½	a	40s ex.	26½	a
14s	14	a	50s	30½	a
16s	14½	a	60s	35	a
20s	15	a15½	Duck Yarns, 3, 4 and 5-Ply		
26s	17½	a18	8s	13	a
30s	18½	a19	10s	13½	a
Southern Two-Ply Chain Warps			12s	14	a
8s	13	a	16s	15	a
10s	13½	a	20s	16	a16½
12s	14	a	Carpet Yarns		
16s	15	a	Tinged carpet, 8s, 3		
20s	16	a	and 4-ply	12	a
24s	17½	a	Colored strips, 8s, 3		
30s	19	a19½	and 4-ply	12½	a
36s	24	a	White carpets, 8s, 3		
40s	25	a	and 4-ply	13	a
40s ex.	26½	a	Part Waste Insulating Yarns		
Southern Single Skeins			8s, 1-ply	11	a
8s	12½	a	10s, 2, 3 and 4-ply	11½	a
10s	13	a	10s, 2, 3 and 4-ply	11½	a
12s	13½	a	12s, 2-ply	12	a
14s	14	a	16s, 2-ply	14	a
16s	14½	a	20s, 2-ply	15	a
20s	15	a15½	26s, 2-ply	17½	a
26s	17½	a18	30s, 2-ply	18	a
30s	18½	a19	Southern Frame Cones		
36s	19½	a20	8s	13	a
Southern Two-Ply Skeins			10s	13½	a14
8s	13	a	12s	14	a14½
10s	13½	a	14s	14½	a15
12s	14	a	16s	15	a15½
14s	14½	a	18s	15½	a16
16s	15	a	20s	16	a16½
20s	16	a	22s	16½	a17
24s	17½	a	24s	17	a17½
26s	18	a	26s	17½	a18
			28s	18	a18½
			30s	18½	a19

## WENTWORTH

### Double Duty Travelers

Last Longer, Make Stronger Yarn, Run Clear, Preserves the SPINNING RING. The greatest improvement entering the spinning room since the advent of the HIGH SPEED SPINDLE.

Manufactured only by the

National Ring Traveler Co.

Providence, R. I.

31 W. First Street, Charlotte, N. C.

Reg. U. S. P. O.



## CLINTON STARCHES

FOR ALL TEXTILE PURPOSES

Manufactured by

CLINTON CORN SYRUP REFINING COMPANY

CLINTON, IOWA

QUALITY

SERVICE

Visit Washington  
*this year*

George Washington  
Bicentennial

• • Reduced fares • •

Southern Railway System

Do You Have a Vacancy That You Wish to Fill?

**Get Your Man!**

Through A

**Classified Ad**

In The

Southern Textile Bulletin

## SOUTHERN SOURCES OF SUPPLY

*for Equipment, Parts, Materials, Service*

Following are the addresses of Southern plants, warehouses, offices, and representatives of manufacturers of textile equipment and supplies who advertise regularly in the SOUTHERN TEXTILE BULLETIN. We realize that operating executives are frequently in urgent need of information, service, equipment, parts or materials, and believe this guide will prove of real value to our subscribers.

**AKRON BELTING CO.**, Akron, O. Sou. Rep.: L. L. Haskins, Greenville, S. C.; L. F. Moore, Memphis, Tenn.

**AKTIVIN CORP.**, The, 50 Union Square, New York City, Sou. Rep.: American Aniline Products, Inc., 1003 W. Trade St., Charlotte, N. C.

**AMERICAN ENKA CORP.**, 271 Church St., New York City, Sou. Rep.: R. J. Mebane, Asheville, N. C.

**AMERICAN MOISTENING CO.**, Providence, R. I. Sou. Plants: Atlanta, Ga.; Charlotte, N. C. Sou. Offices: 1311 W. Morehead St., Charlotte, N. C.; 240 N. Highland Ave., Atlanta, Ga.; 711 Woodside Bldg., Greenville, S. C.; Sou. Reps.: W. I. Burgess and C. A. Burgess, Greenville Office; Marvin McCall, Charlotte Office; J. D. Johnson and W. L. Johnson, Atlanta Office.

**ARABOL MFG. CO. THE**, 110 E. 42nd St., New York City, Sou. Agent: Cameron McRae, Concord, N. C.; Sou. Reps.: W. C. Gibson, Griffin, Ga.; W. L. Cobb, Greenville, S. C.

**ARNOLD HOFFMAN & CO., INC.**, Providence, R. I. Sou. Office: Independence Bldg., Charlotte, N. C. R. E. Buck, Mgr. Sou. Reps.: Harold T. Buck, Wincoff Hotel, Atlanta, Ga.; Frank W. Johnson, P. O. Box 354, Greensboro, N. C.; R. A. Singleton, 2016 Cockrell Ave., Dallas, Tex.; R. E. Buck, Jr. 8 Tindel Ave., Greenville, S. C.

**ASHWORTH BROS., INC.**, Charlotte, N. C. Sou. Offices: 44-A Norwood Place, Greenville, S. C.; 215 Central Ave., S. W., Atlanta, Ga.; Texas Rep.: Textile Supply Co., Dallas, Tex.

**BAHNSON CO. THE**, Reynolds Bldg., Winston-Salem, N. C. Sou. Reps.: S. C. Stimson, 164 Oakland Ave., Spartanburg, S. C.; I. L. Brown, 633 Drewry St., N. E., Atlanta, Ga.; J. C. Sevier, 1400 Duncan Ave., Chattanooga, Tenn.

**BARBER-COLEMAN CO.**, Rockford, Ill. Sou. Office: 31 W. McBee Ave., Greenville, S. C.; J. H. Spencer, Mgr.

**BARKLEY MACHINE WORKS**, Gastonia, N. C. Chas. A. Barkley, president.

**BIGGS-SHAFFNER CO.**, 600 Brooktown Ave., Winston-Salem, N. C. P. O. Box 188, Salem Station, S. A. Harris, Mgr., W. H. Parks, Sales Mgr.

**BORNE-SCHRYMSEER CO.**, 17 Battery Place, New York City, Sou. Reps.: H. L. Slevier, P. O. Box 240, Charlotte, N. C.; W. B. Uhler, 608 Palmetto St., Spartanburg, S. C.; R. B. Smith, 104 Clayton St., Macon, Ga.

**BROWN CO. DAVID**, Lawrence, Mass. Sou. Reps.: Ralph Gossett, Woodside Bldg., Greenville, S. C.; Belton C. Plowden, Griffin, Ga.; Gastonia Mill Supply Co., Gastonia, N. C.; Russell A. Singleton, Dallas, Tex.

**BROWN & CO. D. F.**, 259-261 N. Lawrence St., Philadelphia, Pa. Sou. Rep.: Newlin W. Fyle, Charlotte, N. C.

**BUFFALO ELECTRO-CHEMICAL CO., Inc.**, Sta. B., Buffalo, N. Y. Sou. Warehouses, Union Storage & Warehouse Co., Charlotte, N. C.; Quaker City Chemical Co., Knoxville, Tenn.; Sou. Office 1800 Belvedere Ave., Charlotte, N. C.

**BUTTERWORTH & SONS CO. H. W.**, Philadelphia, Pa. Sou. Office: Johnston Bldg., Charlotte, N. C.; J. Hill Zahn, Mgr.

**CAMPBELL & CO. JOHN**, 75 Hudson St., New York City, Sou. Reps.: M. L. Kirby, P. O. Box 432 West Point, Ga.; Mike A. Stough, P. O. Box 701, Charlotte, N. C.; A. Max Browning, Hillsboro, N. C.

**CHARLOTTE CHEMICAL LABORATORIES, Inc.**, Charlotte, N. C. A. Mangum Webb, Sec.-Treas.

**CHARLOTTE LEATHER BELTING CO.**, 302 E. Sixth St., Charlotte, N. C. Fred R. Cochran, Mgr. Sou. Reps.: W. H. Fortson 110 Tusten St., Elberton, Ga.; Russell A. Singleton, 2016 Cockrell Ave., Dallas, Tex.; W. F. McNulty and W. E. Strane, Charlotte Office

**CIBA CO., INC.**, Greenwich and Morton St., New York City, Sou. Offices: 519 E. Washington St., Greensboro, N. C.; Greenville, S. C.

**CLINTON CORN SYRUP REFINING CO.**, Clinton, Iowa, Sou. Reps.: J. W. Pope, Box 490, Atlanta, Ga.; Luther Knowles, Hotel Charlotte, Charlotte, N. C.

**CORN PRODUCTS REFINING CO.**, 17 Battery Place, New York City, Sou. Office: Corn Products Sales Co., Greenville, S. C. Stocks carried at convenient points.

**CROMPTON & KNOWLES LOOM WORKS**, Worcester, Mass. Sou. Office: 301 S. Cedar St.; S. B. Alexander, Mgr.

**DARY RING TRAVELER CO.**, Taunton, Mass. Sou. Rep.: John E. Humphries, P. O. Box 843, Greenville, S. C.; Chas. L. Ashley, P. O. Box 720, Atlanta, Ga.

**DILLARD PAPER CO.**, Greensboro, N. C. Sou. Reps.: E. B. Spencer, Box 1281, Charlotte, N. C.; R. E. McLeod, Box 1142, Columbia, S. C.; G. N. Wilson, care Ponce de Leon Hotel, Roanoke, Va.

**DIXIE SPINDLE & FLYER CO.**, Charlotte, N. C. A. M. Guillet, Mgr.

**DRAKE CORPORATION**, Norfolk, Va.

**DRAPER CORPORATION**, Hopedale, Mass. Sou. Rep. E. N. Darrin, Vice-Pres.; Sou. Offices and Warehouses, 242 Forsyth St., S. W., Atlanta, Ga. W. M. Mitchell; Spartanburg, S. C., Clare H. Draper, Jr.

**DU PONT EAYON CO.**, 2 Park Ave., New York City, Sou. Plants: Old Hickory, Tenn.; A. Kunsman, Mgr.; Richmond, Va., W. Shackelford, Mgr. Sou. Reps.: F. H. Coker, Dist. Sales Mgr., 611 Johnston Bldg., Charlotte, N. C.; F. F. Hubach, Dist. Sales Mgr., 609 Provident Bldg., Chattanooga, Tenn.

**DU PONT DE NEMOURS & CO. E. I.**, Wilmington, Del. Sou. Office, 302 W. First St., Charlotte, N. C.; John L. Dabbs, Mgr. Sou. Warehouse: 302 W. First St., Charlotte, N. C.; Wm. F. Crayton, Mgr. Sou. Reps.: D. C. Newman, L. E. Green, H. B. Constable, Charlotte Office; J. D. Sandridge, 1021 Jefferson St., Bldg., Greensboro, N. C.; B. R. Dabbs, 715 Provident Bldg., Chattanooga, Tenn.; W. R. Ivey, 111 Mills Ave., Greenville, S. C.; J. M. Howard, 135 S. Spring St., Concord, N. C.; W. F. Crayton, Ralston Hotel, Columbus, Ga.; J. A. Franklin, Augusta, Ga.; R. M. Covington, 715 Provident Bldg., Chattanooga, Tenn.

**EATON, PAUL B.**, 218 Johnston Bldg., Charlotte, N. C.

**ECLIPSE TEXTILE DEVICES**, Elmira, N. Y. Sou. Reps.: Eclipse Textile Devices Co., care Pelham Mills, Pelham, S. C.; Eclipse Textile Devices Co., care Bladenboro Cotton Co., Bladenboro, N. C.

**EMMONS LOOM HARNES CO.**, Lawrence, Mass. Sou. Rep.: George F. Bahan, P. O. Box 581, Charlotte, N. C.

**FIDELITY MACHINE CO.**, 3908 Franklin Ave., Philadelphia, Pa. Sou. Rep.: E. A. Corbin, Philadelphia Office.

**FIRTH-SMITH CO.**, 161 Devonshire St., Boston, Mass. Southern Rep.: Wm. B. Walker, Jalong, N. C.

**FORD CO. J. B.**, Wyandotte, Mich. Sou. Reps.: J. B. Ford Sales Co., 1147 Hurt Bldg., Atlanta, Ga.; J. B. Ford Sales Co., 1915 Inter-Southern Life Bldg., Louisville, Ky.; J. B. Ford Sales Co., 1405 Whitney Bldg., New Orleans, La. Warehouses in all principal Southern cities.

**FRANKLIN PROCESS CO.**, Providence, R. I. Southern Franklin Process Co., Greenville, S. C., B. S. Phetteplace, Mgr. Central Franklin Process Co., Chattanooga, Tenn. C. R. Ewing, Mgr.

**GASTONIA BRUSH CO.**, Gastonia, N. C. C. E. Honeycutt, Mgr.

**GENERAL DYESTUFF CORP.**, 230 Fifth Ave., New York City, Sou. Office & Warehouse, 1101 S. Blvd., Charlotte, N. C., B. A. Stagen, Mgr.

**GENERAL ELECTRIC CO.**, Schenectady, N. Y. Sou. Sales Offices & Warehouses: Atlanta, Ga., E. H. Gunn, Dist. Mgr.; Charleston, W. Va., W. L. Alston, Mgr.; Charlotte, N. C., E. F. Coles, Mgr.; Dallas, Tex., L. T. Blaisdell, Dist. Mgr.; Houston, Tex., E. M. Wise, W. O'Hara, Mgr.; Oklahoma City, Okla., F. B. Hathway, B. F. Dunlap, Mgrs. Sou. Sales Offices: Birmingham, Ala., R. T. Brooke, Mgr.; Chattanooga, Tenn., W. O. McKinney, Mgr.; Ft. Worth, Tex., A. H. Keen, Mgr.; Knoxville, Tenn., A. B. Cox, Mgr.; Louisville, Ky., E. B. Myrick, Mgr.; Memphis, Tenn., G. O. McFarlane, Mgr.; Nashville, Tenn., J. H. Barksdale, Mgr.; New Orleans, La., B. Willard, Mgr.; Richmond, Va., J. W. Hicklin, Mgr.; San Antonio, Tex., I. A. Uhr, Mgr.; Sou. Service Shops: Atlanta, Ga., W. J. Seibert, Mgr.; Dallas, Tex., W. F. Kaston, Mgr.; Houston, Tex., F. C. Bunker, Mgr.

**GENERAL ELECTRIC VAPOR LAMP CO.**, Hoboken, N. J. Sou. Reps.: Frank E. Keener, 187 Spring St., N. W., Atlanta, Ga.; C. N. Knapp, Commercial Bank Bldg., Charlotte, N. C.

**GILL LEATHER CO.**, Salem, Mass. Sou. Reps.: Ralph Gossett, 904 Woodside Bldg., Greenville, S. C.; Hammer & Kirby, Gastonia, N. C.; Belton C. Plowden, Griffin, Ga.

**GOODYEAR TIRE & RUBBER CO., INC.**, THE, Akron, Ohio. Sou. Reps.: W. C. Killick, 205-207 E. 7th St., Charlotte, N. C.; P. B. Eckels, 141 E. Myrtle Ave., Jacksonville, Fla.; Boyd Arthur, 713-715 Linden Ave., Memphis, Tenn.; T. F. Stringer, 500-6 N. Carrollton Ave., New Orleans, La.; E. M. Champion 709-11 Spring St., Shreveport, La.; Paul Stevens, 1609-11 First Ave., North Birmingham, Ala.; B. S. Parker, Jr., Cor. W. Jackson and Oak Sts., Knoxville, Tenn.; E. W. Sanders, 209 E. Broadway, Louisville, Ky.; H. R. Zierach, 1225-31 W. Broad St., Richmond, Va.

**HALTON'S SONS, THOS., "C"** and Clearfield Philadelphia, Pa. Sou. Rep.: Dennis J. Dunn, P. O. Box 1261, Charlotte, N. C.

**HART PRODUCTS CORP.**, 1440 Broadway, New York City, Sou. Reps.: Chas. C. Clark, Box 274, Spartanburg, S. C.; Samuel Lehrer, Box 265, Spartanburg, S. C.; W. G. Shull, Box 923, Greenville, S. C.; O. T. Daniel, Textile Supply Co., 30 N. Market St., Dallas, Tex.

**HERMAS MACHINE CO.**, Hawthorne, N. J. Sou. Rep.: Carolina Specialty Co., P. O. Box 520, Charlotte, N. C.

**HOUGHTON & CO. E. F.**, 240 W. Somerset St., Philadelphia, Pa. Sou. Reps.: J. M. Keith, 526 Rhodes-Haverty Bldg., Atlanta, Ga.; Jas. A. Brittain, 820 Comer Bldg., Birmingham, Ala.; Porter E. Brown, F. O. Box 856, Chattanooga, Tenn.; H. J. Waldron and D. O. Wylie, P. O. Box 563, Greensboro, N. C.; R. J. Maxwell, P. O. Box 1241, Greenville, S. C.; G. F. Davis, 418 N. 3rd St., St. Louis, Mo., for New Orleans, La.

**HOWARD BROS. MFG. CO.**, Worcester, Mass. Sou. Office and Plant: 244 Forsyth St., S. W., Atlanta, Ga.; Guy L. Melcher, Mgr. Sou. Reps.: E. M. Terryberry, 208 Embassy Apts., 1613 Harvard St., Washington, D. C.; Guy L. Melcher, Jr., Atlanta, Office.

**HYGROLIT, INCORPORATED**, Kearny, N. J. Southern Reps.: J. Alfred Lechler, 519 Johnston Bldg., Charlotte, N. C.; Belton C. Plowden, Griffin, Ga.

**JOHNSON, CHAS. B.**, Paterson, N. J. Sou. Rep.: Carolina Specialty Co., Charlotte, N. C.

**KEEVER STARCH CO.**, Columbus, Ohio. Sou. Office: 1200 Woodside Bldg., Greenville, S. C.; Daniel H. Wallace, Sou. Agent, Sou. Warehouses: Greenville, S. C., Charlotte, N. C., Burlington, N. C., Rep.: Claude B. Har, P. O. Box 1383, Greenville, S. C.; Luke J. Castle, 2121 Dartmouth Place, Charlotte, N. C.; F. M. Wallace, 2027 Morris Ave., Birmingham, Ala.

**LOCKWOOD-GREENE ENGINEERS, INC.**, 100 E. 42nd St., New York City, Sou. Office: Montgomery Bldg., Spartanburg, S. C.; R. E. Barnwell, V. P.

**MANHATTAN RUBBER MFG. DIVISION OF RAYBOSTOS-MANHATTAN, INC.**, Passaic, N. J. Sou. Offices and Reps.: The Manhattan Rubber Mfg. Div., 1108 N. Fifth Ave., Birmingham, Ala.; Alabama-Aniston, Aniston Hdw. Co.; Birmingham, Crandall Eng. Co. (Special Agent); Birmingham, Long-Lewis Hdw. Co.; Gadsden, Gadsden Hdw. Co.; Huntsville, Noolin Hdw. & Supply Co.; Tuscaloosa Allen & Jenson Co., Montgomery, Teague Hardware Co., Florida-Jacksonville, The Cameron & Barkley Co., Miami, The Cameron & Barkley Co., Tampa, The Cameron & Barkley Co., Georgia-Atlanta, Atlanta Belting Co.; Augusta, Bearing Parts & Supply Co.; Columbus, A. H. Watson (Special Agent); Macon, Bibb Supply Co.; Savannah, D. DeTreville (Special Agent); Kentucky-Ashland, Ben Williamson & Co.; Harlan, Kentucky Mine Supply Co.; Louisville, Grati-Pelle Co., North Carolina-Charlotte, Matthews-Morse Sales Co.; Charlotte, Charlotte Supply Co.; Fayetteville, Huske Hdw. House; Gastonia, Gastonia Belting Co.; Goldsboro, Dewey Bros.; High Point, Beeson Hdw. Co.; Lenoir, Bernhardt-Seagle Co.; Rockingham, Roy Walker (Special Agent); Wilmington, Wilmington Iron Works; Winston-Salem, Kester Machinery Co. South Carolina-Anderson, Sullivan Hdw. Co.; Charleston, The Cameron & Barkley Co.; Clinton, Industrial Supply Co.; Columbia, Columbia Supply Co.; Greenville, Sullivan Hdw. Co.; Sumter, Sumter Machinery Co.; Spartanburg, Montgomery & Crawford, Tennessee-Chattanooga, Belting & Supply Co.; Johnson City, Summers Hdw. Co.; Knoxville, W. J. Savage Co.; Nashville, Buford Bros., Inc. Service Rep.; J. F. Carter, 62 North Main St., Green, S. C. (Phone 185). Salesmen: E. H. Olney, 101 Gertrude St., Alta Vista Apts., Knoxville, Tenn.; C. F. Shook, Jr., 1031 North 30th St., Birmingham, Ala.

**MARSTON CO. JOHN P.**, 247 Atlantic Ave., Boston, Mass. Sou. Rep.: O. H. Ochis, Hotel Charlotte, Charlotte, N. C.

**MATHIESON ALKALI WORKS, INC.**, 250 Park Ave., New York City, Sou. Plant, Saltville, Va., E. A. Hulta, V-Pres. Sou. Office: First Nat'l Bank Bldg., Charlotte, N. C.; Fred C. Tilson, Mgr. Sou. Reps.: E. M. Murray, E. M. Rollins, Jr., J. W. Ivey and B. T. Crayton, Charlotte Office; R. C. Staple, Box 483, Chattanooga, Tenn.; Z. N. Holler, 208 Montgomery St., Decatur, Ga.; J. W. Edmiston, Box 570, Memphis, Tenn.; V. M. Coates, 807 Lake Park, Baton Rouge, La.; T. J. Boyd, Adolphus Hotel, Dallas, Tex.

**MAUNEY STEEL CO.**, 237 Chestnut St., Philadelphia, Pa. Sou. Reps.: Aubrey Mauney, Burlington, N. C.; D. L. Huriburt, 511 James Bldg., Chattanooga, Tenn.

**MORTON MACHINE WORKS**, Columbus, Ga. Sou. Rep.: Carolina Specialty Co., Charlotte, N. C.

**NATIONAL ANILINE & CHEMICAL CO., INC.**, 40 Rector St., New York City, Sou. Office & Warehouse: 201 W. First St., Charlotte, N. C.; W. H. Willard, Mgr. Sou. Reps.: J. I. White, W. L. Barker, C. E. Blakely, Charlotte Office; J. T. Chase, American Savgs. Bk. Bldg., Atlanta, Ga.; H. A. Rodgers, 910 James Bldg., Chattanooga, Tenn.; J. E. Shuford, Jefferson St., Life Bldg., Greensboro, N. C.; E. L. Pemberton, 342 Dick St., Fayetteville, N. C.

**NATIONAL OIL PRODUCTS CO.**, Harrison, N. J. Southern Reps.: R. B. MacIntyre, Hotel Charlotte, Charlotte, N. C.; G. H. Small, 310 Sixth St., N. E., Atlanta, Ga.; Warehouse, Chattanooga, Tenn.

**NATIONAL RING TRAVELER CO.**, 257 W. Exchange St., Providence, R. I. Sou. Office and Warehouse: 131 W. First St., Charlotte, N. C. Sou. Reps.: L. E. Taylor, Charlotte Office; C. D. Taylor, Sou. Agent, Gaffney, S. C.; Otto Pratt, Gaffney, S. C.; H. L. Lanier, Shawmut, Ala.; Roy E. Clemmons, 926 W. Peachtree St., Atlanta, Ga.

**NEW YORK AND NEW JERSEY LUBRICANT CO.**, 293 Madison Ave., New York City, Sou. Office, 601 Kingston Ave., Charlotte, N. C.; Lewis W. Thomas, Sou. Dist. Mgr. Sou. Warehouses: Charlotte, N. C., Spartanburg, S. C., New Orleans, La., Atlanta, Ga., Greenville, S. C.

**OAKITE PRODUCTS, INC.**, New York, N. Y. Sou. Dist. Office and Warehouse, Atlanta, Ga., L. W. McGinn, Div. Mgr.; Atlanta, Ga., E. Moline, Augusta, Ga.; R. H. Bailey, Memphis, Tenn.; H. J. Canny, Greensboro, N. C.; L. H. Gill, New Orleans, La.; W. A. McBride, Richmond, Va.; P. F. Wright, Chattanooga, Tenn.; J. C. Leonard, Div. Mgr., St. Louis, Mo.; W. B. Mix, Dallas, Tex.; C. A. Ormsby, Indianapolis, Ind.; G. C. Folley, Houston, Tex.; H. J. Steeb, St. Louis, Mo.; G. W. Tennyson, Peoria, Ill.; B. C. Browning, Tulsa, Okla.; E. M. Browning, Kansas City, Mo.; H. Bryan, Oklahoma City, Okla.; C. L. Fischer, St. Louis, Mo.



**PERKINS & SON, INC.**, R. F. Holyoke, Mass.  
Sou. Rep.: Fred H. White, Independence Bldg.,  
Charlotte, N. C.

**PLATT'S METALLIC CARD CLOTHING CO.**,  
Lexington, N. C. U. S. Agents F. L. Hill, Box 407,  
Lexington, N. C. Sou. Reps.: W. F. Stegall, Cra-  
mertown, N. C.; R. L. Burkhead, Varner Bldg., Lex-  
ington, N. C.

**ROCKWEAVE MILLS**, LaGrange, Ga., Wm. H.  
Turner, Jr., V-Pres. and Gen. Mgr. Sou. Reps.:  
Carolina Specialty Co., Charlotte, N. C.; Hamner &  
Kirby, Gastonia, N. C.; J. M. Tull Rubber & Sup-  
ply Co., 285 Marietta St., Atlanta, Ga.; Young &  
Vann Supply Co., 1725 First Ave., Birmingham,  
Ala.; Mills & Lupton Supply Co., Chattanooga,  
Tenn.; Nashville Machine & Supply Co., Nashville,  
Tenn.; Montgomery & Crawford, Spartanburg, S.  
C.; Sullivan Hdw. Co., Anderson, S. C.; Nolan  
Co., Inc., Roanoke, Va.

**SACO-LOWELL SHOPS**, 147 Milk St., Boston,  
Mass. Sou. Office and Repair Depot, Charlotte, N.  
C.; Walter W. Gayle, Sou. Agent; Branch Sou.  
Offices: Atlanta, Ga.; John L. Graves, Mgr.; Spar-  
tanburg, S. C.; H. P. Worth, Mgr.

**SEYDEL-WOOLEY CO.**, 748 Rice St., N. W. At-  
lanta, Ga.

**SHAMBOW SHUTTLE CO.**, Woonsocket, R. I.  
Sou. Rep.: M. Bradford Rodgers, Box 752, Atlanta,  
Ga.

**SIPP-EASTWOOD CORPORATION**, Paterson, N.  
J. Sou. Rep.: Carolina Specialty Co., Charlotte,  
N. C.

**SIRKINE & CO.**, J. E. Greenville, S. C.  
**SOLVAY SALES CORP.**, 61 Broadway, New York  
City, Sou. Reps.: Chas. H. Stone, 822 W. More-  
head St., Charlotte, N. C.; Burkhardt-Schier Chem-  
ical Co., 1202 Chestnut St., Chattanooga, Tenn.;  
Woodward Wight Co., 451 Howard Ave., New  
Orleans, La.; J. A. Sudduth & Co., Birmingham,  
Ala.; Miller-Lenfesty Supply Co., Tampa, Miami  
and Jacksonville, Fla.

**SONOCO PRODUCTS CO.**, Hartsville, S. C.  
**SOUTHERN SPINDLE & FLYER CO.**, Charlotte,  
N. C.

**STANLEY WORKS, THE**, New Britain, Conn.  
Sou. Office and Warehouse: 553 Murphy Ave., S.W.  
Atlanta, Ga.; H. C. Jones, Mgr.; Sou. Reps.: Hor-  
ace E. Black, P. O. Box 424, Charlotte, N. C.

**STEEL HEDDLE MFG. CO.**, 2100 W. Allegheny  
Ave., Philadelphia, Pa. Sou. Office and Plant: 621  
E. McBee Ave., Greenville, S. C. H. E. Littlejohn,  
Mgr., Sou. Reps.: W. O. Jones and C. W. Cain,  
Greenville Office.

**STEIN, HALL & CO., INC.**, 285 Madison Ave.,  
New York City, Sou. Office, Johnston Bldg., Char-  
lotte, N. C. Ira L. Griffin, Mgr.

**TERRELL MACHINE CO.**, Charlotte, N. C., E.  
A. Terrell, Pres. and Mgr.

**TEXTILE-FINISHING MACHINERY CO., THE**,  
Providence, R. I. Sou. Office 909 Johnston Bldg.,  
Charlotte, N. C. H. Q. Mayer, Mgr.

**U S ROBBIN & SHUTTLE CO.**, Manchester, N.  
H. Sou. Plants: Monticello, Ga. (Jordan Division);  
Greenville, S. C.; Johnson City, Tenn. Sou. Reps.:  
L. K. Jordan, Sales Mgr., First National Bank  
Bldg., Charlotte, N. C.

**U. S. RING TRAVELER CO.**, 159 Aborn St.,  
Providence, R. I. Sou. Reps.: Wm. P. Vaughan,  
Box 792, Greenville, S. C.; O. B. Land, Box 4,  
Marietta, Ga. Stocks at: Textile Mill Supply Co.,  
Charlotte, N. C.; Charlotte Supply Co., Charlotte,  
N. C.; Gastonia Mill Supply Co., Gastonia, N. C.;  
Carolina Mill Supply Co., Greenville, S. C.; Sulli-  
van Hdw. Co., Anderson, S. C.; Fulton Mill Supply  
Co., Atlanta, Ga.; Young & Vann Supply Co., Bir-  
mingham, Ala.

**VEEDER-ROOT, INC.**, Hartford, Conn. Sou.  
Reps.: W. A. Kennedy Co., Johnston Bldg., Char-  
lotte, N. C.; Carolina Specialty Co., 122 Brevard  
Court, Charlotte, N. C.

**VICTOR RING TRAVELER CO.**, Providence, R.  
I. Sou. Offices and Warehouses: 615 Third National  
Bank Bldg., Gastonia, N. C.; A. B. Carter, Mgr.;  
520 Angier Ave., N. E., Atlanta, Ga.; B. F. Barnes,  
Mgr., Sou. Reps.: B. F. Barnes, Jr., Atlanta Office;  
A. D. Carter and N. H. Thomas, Gastonia Office.

**VISCOSE CO.**, Johnston Bldg., Charlotte, N. C.  
H. Wick Rose, Mgr.

**WHITIN MACHINE WORKS**, Whitinsville, Mass.  
Sou. Offices: Whitin Bldg., Charlotte, N. C.; W.  
H. Porcher and R. I. Dalton, Mgrs.; 1317 Healey  
Bldg., Atlanta, Ga. Sou. Reps.: M. P. Thomas,  
Charlotte Office; I. D. Wingo and M. J. Bentley,  
Atlanta Office.

**WHITINSVILLE SPINNING RING CO.**, Whitins-  
ville, Mass. Sou. Rep.: Webb Durham, 2029 East  
Fifth St., Charlotte, N. C.

## Cotton Goods Improve

"The Government crop report on Thursday was again a surprise, being larger than expected, but the action of the cotton market as well as the goods market was most encouraging. Just prior to the report there was considerable activity. Then for a few hours thereafter the market quieted down but later it steadied and cloth prices generally remained unchanged for the day, all of which appears to indicate that we are possibly nearing the irreducible minimum in prices. For the week there was fair volume

in various constructions of sheetings and some print cloths and broad-  
cloths. On colored goods the volume was very satisfactory and even for the past several relatively quiet weeks there has been a net increase in un-  
filled orders on many constructions," the Hunter Manufacturing and Com-  
mission Company reports.

"Last week we referred to the pur-  
chasing power of the farmers and in this connection it is interesting to note that from the year 1920 to 1930 there was a marked movement from the farm to the city. From 1924 to 1929 an annual average of two million persons left the farm for the city, while approximately one million, three hundred thousand returned, resulting in a loss in farm population of about seven hundred thousand persons a year; the back-to-the-farm move-  
ment, which started in 1930, up to date will, however, more than offset the net loss during the previous ten years. This has been a most whole-  
some development and has played an important part in relieving to some extent the distress in the cities.

"Many buyers have not yet placed their requirements for January and, while this is not generally the time for activity in the primary market, with a little further clearing of the atmosphere, such as a more definite understanding on the foreign debts, taxes, etc., we will not be surprised to see a fair movement of goods during the next few weeks."

## Jute vs. Cotton

Washington.—That New England manufacturers of jute and Southern cotton producers are going to clash again over contracts with the Post-office Department for binding twine is indicated by questions asked of government officials by members of the appropriations committee of the House of Representatives.

H. R. Nichol, of the office of the Fourth Assistant Postmaster General, was questioned by Chairman Joseph W. Byrns, Democrat, of Tennessee, and Representative Maurice H. Thatcher, Republican, of Kentucky, about the comparative cost of jute and cotton twine. Mr. Nichol said the difference was about \$30 for 1,760,000 pounds, cotton being the more expensive.

"In that sort of case you could have accepted cotton upon the ground that it is grown here, could you not?" Chairman Byrns asked.

"Jute is manufactured in the United States," replied Mr. Nichol. "The wording of the case is obvious."

"In the case of cotton, you have both domestic growth and manufac-  
ture," Mr. Thatcher suggested.

"Jute is produced by coolie labor in India?"

"Yes," was the answer.

Massachusetts manufacturers have a contract for the Postoffice Depart-  
ment twine for the first six months of 1933 and early in the New Year a contract will be let for a supply for the second half of the year. South-  
ern producers have asked their Con-  
gressmen to make the domestic pref-  
erence law a little stronger.

## Exports of Rayons Show Sharp Rise

Washington.—Export trade in ray-  
one in October experienced the usual seasonal upswing, with shipments from \$117,590 in September to \$187,044, it is disclosed by the Depart-  
ment of Commerce.

In the corresponding month last year exports increased from \$278,173 to \$359,615.

Exports of rayon hosiery, the fig-  
ures show, increased from 9,782 doz-  
en pairs valued at \$18,329 in Sep-  
tember to 12,352 dozen pairs valued at \$24,882 in October. Other exports in October included 27,448 pounds of yarn valued at 23,762, against 7,072 pounds valued at \$8,577 the preced-  
ing month; 96 pounds of embroidery, corchet and knitting thread valued at \$373, against 110 pounds valued at \$285; 882 square yards of tapestry and drapery fabrics valued at \$839, against 617 square yards valued at \$488; 245,888 square yards of woven dress and piece goods valued at \$70,824, against 192,846 square yards valued at \$53,217; 119 pounds of knit dress and piece goods valued at \$262, against 62 pounds valued at \$156; 5,163 dozen knit underwear valued at \$23,691, against 3,324 doz-  
en valued at \$11,039; 238,563 yards of ribbons, braids, fringes and nar-  
row trimmings valued at \$1,861, against 197,256 yards valued at \$4,042, and other manufactures valued at \$40,550, against \$21,457.

## Mill Donates Flannel

Wadesboro, N. C.—The Wade Manufacturing Company recently sent more than 3,000 yards of outing flannel for underclothes to six or-  
phanages. The same mill assisted the State's orphanages last year, when it contributed gifts of chambray and other cloths.

# Mill Village Activities

*Edited by Mrs. Ethel Thomas Dabbs—"Aunt Becky."*

## LEAKSVILLE, N. C.

KARASTAN RUG MILLS—THE ONLY RUG MILL OF THE  
KIND IN THE SOUTH—RUGS THAT EQUAL THE  
FINEST ORIENTAL WEAVES.

We go to many places, and our space is so limited we can't do justice to any; but we must write a few lines about the wonderful mills in Leaksville, and the fine people we met there. Plenty of "key men" here, and members of the Carolina Co-operative Council. W. J. Baughn, shop man, is president of the Council, and we met him while in Leaksville.

Were it possible, we'd like to describe those rug-looms which are as large as some houses, but they are beyond the reach of this scribe. They have to be seen to be appreciated. To see those lovely patterns unfolding in the finest plush weaves is a marvelous sight, and we have great respect for those pattern makers and skilled weavers.

Many of those fine department leaders read our paper and we wish some one would write an article for us on rug weaving.

J. J. Shumate is superintendent, and has been on the job ten years; Virgil Hall is overseer weaving; L. N. Reynolds, threading; S. B. Pitts, setting; Roy Wariner, burling; J. C. Lane, finisher; R. H. Tuttle, dyer, assisted by W. H. Owens; Morris Turner, washing department; Harry Patterson, shipping; Roy Self, master mechanic; O. B. Robbins, yard man.

### THE BEDSPREAD MILL

Here's where our jolly, long-timed friend, B. W. Koontz, graces the superintendent's office. He has been with the company 23 years. This and Karastan Rug Mill both belong to the Marshall Field group of mills, and have the same high type department heads and employees.

Bedspreads could not be more beautiful than these, designed by H. P. Mansfield and four beautiful girls, Misses Eunice Barham and Lena Honeycutt, and Mesdames Lessie Chambers and Ruby Matthews.

A. J. Matthews, overseer weaving in Mill No. 1, is a man in love with his work, and enjoyed showing us the lovely patterns on his looms.

J. E. McAlister is carder and spinner; R. W. Barham is carder, spinner and weaver in No. 2; E. J. Mansfield is overseer finishing; W. A. Cooper, overseer bleaching and dyeing; Owen Bain, overseer gray room.

Other key men and Council members who take our paper here are J. L. Phillips, second hand in slashing and warping; H. R. Kendrick and L. M. Moore, loom fixers; J. H. Crowder, second hand in No. 1 spinning; C. J. Buckner, second hand in weaving; Andrew Collins and C. M. Wheatley, section men in spinning; G. W. McAlister, second hand in carding No. 1; R. L. Talbot, section man in card room; B. L. Hundley, card grinder; G. H. Simpson, shipping clerk; Sam Stultz, section man in winder room; J. A. McKinney, clerk, Karastan Rug

Mill; H. D. McGinnis, warp machines, and J. D. Herbert, experimental work in rug mill.

These are among the most interesting and "full-of-pep" folks we have met in a long time, and we are proud of our long chain of readers here; may no link ever be broken.

### THE GATE WATCHMAN

A whole book could be written about G. N. Ray, gate man for 17 years. He was a soldier in the Spanish-American war and lost a leg in the Philippine Islands in 1898. Mr. Ray is one of the most courteous and obliging gentlemen we have met, and we told him so. In fact, every person we met in these two mills was as fine to us as could be.

## ANDERSON, S. C.

GLENN STREET SCHOOL HAS OVER 1,200 PUPILS FROM  
ANDERSON COTTON MILL, APPLETON CO.'S EQUINOX  
MILL AND TOWNSEND COTTON MILL.

We are always glad to visit Anderson Cotton Mills, where the atmosphere is genial and progressive.

Here, Superintendent J. R. Manley and James M. Cathcart, assistant secretary and treasurer, make one realize that courtesy and consideration are still elements of good business. They do everything possible for their employees, because they have a genuine interest in every-one connected with the mill.

It was our good fortune to be entertained in the hospitable home of Mr. and Mrs. W. E. Carter. It took Mr. Carter a long time to put on matrimonial harness, but he has made a wonderful husband and is the proud daddy of two fine children, Thomas and Margaret. He is overseer spinning.

Mrs. Carter is an enthusiastic member of the P. T. A. and had just attended a meeting. This association has 300 members. Mrs. Lottie Estes, principal Glenn Street School, is president and has 20 vice-presidents.

### GLENN STREET SCHOOL

This is probably the largest grammar school in the State, and serves four mill communities—Appleton, Townsend, Equinox and Anderson Cotton Mills.

Gee McGee (the Will Rogers of the South) is trustee and treasurer for this school district, embracing two high and seven large grammar schools, and is such an efficient manager that the 142 teachers are all paid promptly, and there are no school debts to worry about.

Glenn Street School alone has 1,300 pupils, 34 class rooms and as many teachers. There are eight first grades, six second grades, six third grades, five fourth grades, four fifth grades, three sixth and two seventh grades.

### THE NEW AUDITORIUM

In seven years, Mrs. Lottie Estes and her teachers and pupils made and saved \$1,400, and in seven days, Gee McGee raised a like sum to spend on Glenn Street School, which now has a large and commodious auditorium—56



by 94 feet, with stage 22 by 56, and gallery 16 by 56. This auditorium is appropriately named The Lottie Estes Hall, for that noble woman who has spent most of her life teaching in this school district. Some of the children she used to teach are now fathers and mothers and members of her P. T. A.

#### A TALENTED BOY

The manufacturers of Fisher auto bodies are always looking for boys with talent and skill, and they offered \$100 in cash and a free trip to Detroit to the boy who could build the best miniature coach of the style used by royalty 150 years ago. C. L. Sheridan, a 14-year-old seventh grade boy in Glenn Street School, won the prize. His coach, a model done in crimson and gold—the most exquisitely hand-carbed work we have ever seen—with upholstery in blue and white velvet with gold trimming, is beautiful beyond description.

#### THE STRETCH-OUT SYSTEM

Gee McGee, who, with Mrs. Carter, went with us to visit Glenn Street School, is as witty as ever. He was asking us about our work—said he had been hearing a lot about the "stretch-out system" and had at last found out exactly what it was: "A man stretches out in bed and makes his wife get up and build fires!"

To the twenty-five whose names were added to our subscription list at Anderson Cotton Mills, and to Mr. Cathcart and Mr. Manley, who made it possible, we extend thanks, and many good wishes for a Merry Christmas.

### Howard Bradshaw Laughs When Depression is Mentioned

HE HAS PROVEN THAT THERE IS BUSINESS FOR A GO-GETTER.

One year ago "Uncle Hamp" and "Aunt Becky" visited Howard Bradshaw's loom-reed repair shop in New Brookland, S. C.—a small crowded one-room affair, where he then employed six workers.

Naturally, we wondered if, like other folks, he had found it necessary to curtail operations or maybe close up altogether. But imagine our delightful surprise last week when we found that he had completely outgrown his former shop and was moving into a large and commodious new structure with plate-glass front on a prominent business street. He now has 12 employees, with a constant increase in business, and is one of the most influential citizens of his town.

He was urged to run for mayor the past election, but was too busy; however, a man of his ability and progressive views will sooner or later yield to public demands and become a political leader. We expect great things of this young man.

### EASLEY, S. C.

ALICE MILLS

Everything going nicely here, and that grand gentleman, Mr. McKissick, president, is as alert as ever.

Some old houses are being torn down and reconstructed along more modern lines, and other houses are being nicely latticed from ground up, adding greatly to the attractiveness.

There are more cows in the village than there were—and fewer "Lizzies" and "John Henrys"—thanks to a

live-at-home program that Mr. McKissick has encouraged.

#### GLENWOOD COTTON MILL

We would not feel that we had been to Easley should we fail to see that genial gentleman, C. B. Hagood, president and treasurer here and at Pickens Cotton Mills, Pickens, S. C. Also met B. F. Hagood, vice-president and assistant treasurer, a young man with pleasing personality.

These gentlemen *do* as well as *say* things. In other words, they not only compliment Mr. David Clark in words for his courageous defense of the right and his bold stand against the wrong, but they back him up in deeds.

The beautiful fast-color prints made here are known far and wide for their superior quality.

M. E. Garrison is superintendent at Glenwood Cotton Mills, and A. J. Jewell is superintendent at Pickens.

### TOCCOA, GA.

HARTWELL MILLS No. 2

Hartwell Mills are running a full day and night shift. They have 8,148 spindles and 228 looms on sheetings. A. F. Garrison is superintendent. The overseers are: S. J. Burden, carder; J. N. Howard, spinner; A. L. Campbell, weaver; F. W. Burden, cloth room, and G. W. Ramsey, master mechanic.

### Hosiery Association Hits Protection on Price Drop

The National Association of Hosiery and Underwear Manufacturers, commenting upon demands of important retail buyers for protection on market price turns in its weekly news bulletin:

"The following clause was rubber-stamped on an order recently received by one of our member manufacturers from a large retail store with which the mill had not previously done business:

"The vendor accepts this order with the understanding that if the unit amount price of any item on this order is reduced and (or) the percentage of discount increased between the date hereon and \_\_\_\_\_, the merchandise so reduced will be invoiced at the revised unit price and (or) at the new increased discount."

"The mill in question refused to accept confirmation of the order containing the above clause and the clause was cancelled by the buyer, with the explanation that it had been affixed to the confirmation in error, being used by the store only in the purchase of certain merchandise other than hosiery.

"It is obvious, of course, that acceptance by a manufacturer of any order containing a clause of this kind binds him to give the buyer the benefit of any decline in market prices, and makes no counter-provision for the protection of the seller in the event the market advances. It is strictly a one-way proposition, entirely to the advantage of the buyer, and it would be foolish for any manufacturer to accept it.

"When the day comes that manufacturers are permitted to invoice goods at a higher price than that specified in a sales contract, provided the market goes up prior to delivery of the goods, then it will be fair and proper for buyers to demand protection against a decline in prices."

## CLASSIFIED ADS.

### HUNTER'S TRAVELER

6—Foster No. 30 Cone Winders.  
100—Saco-Lowell Cards, 1917.  
25—S-L Drawing, 4 del. each.  
2—S-L Twisters, 3 1/2" G. tape D.  
400—Loom Beams, 20" heads.  
1—Million heddles, Duplex and Straight.  
1100—Rings, 1 3/4", No. 1 flange.  
**HUNTER MACHINERY CO.**  
610 Johnston Bldg. Charlotte, N. C.

WANTED—5-Roll Calender, 3 Husk and 2 Metal Rolls preferred. 2 High Speed Ball Warpers with continuous Creels. 4 High Speed Winders. Hannah Pickett Mills, Rockingham, N. C.

### Ginnings Again

#### Show Staple Off

Washington.—Cotton ginned during the week November 28 to December 3 was of lower grade and shorter staple than indicated last week, according to the weekly cotton grade and staple report made public by the Bureau of Agricultural Economics.

The proportion of white strict middling and better is somewhat less for the United States than shown last week, and there are decreases for all important producing States, with the

exception of Louisiana, for which a decided increase is reported.

A slight decrease in the proportion of white middlings is reported for the United States. Decreased proportions are shown for all States, with the exception of Georgia, Louisiana and Tennessee.

The proportion of spotted and yellow tinged cotton is slightly less for the United States than was shown last week. Increased proportions are reported for Alabama, Arkansas, Georgia, Missouri, North Carolina, Oklahoma, South Carolina, and Tennessee, but these are more than offset by decreases in Louisiana, Mississippi and Texas.

There is a decided increase over last week in the proportion of cotton shorter than seven-eighth-inch reported for the United States. Increased proportions are reported for Alabama, Arkansas, Louisiana, Mississippi, Tennessee and Texas, whereas decreases are shown for Georgia, Oklahoma and the Carolinas.

The proportions of 15-16 and 1-inch cotton is less for the United States than that shown in last week's report. Decreased proportions are reported also for all States, with the exception of Arkansas.

The proportion of cotton 1 1/2 inches and longer is less than last week for the United States, and for Arkansas, Louisiana, Mississippi and South Carolina.

For the United States, the proportion of tenderable cotton is less than that shown last week, but still more than 92 per cent is shown to be tenderable. All important producing States show a decrease in the proportion of tenderable cotton, with the exception of South Carolina and Georgia.

### Cotton-Covered Bales

New Orleans.—Master cotton spinning associations in 20 nations have endorsed efforts of the International Federation of Master Cotton Spinners and Manufacturers' Associations of Manchester, Eng., to bring about the sale of cotton-covered bales of cotton on a net weight basis, according to information received by S. Odenheimer, president of the Lane Cotton Mills and for many years an advocate of cotton covering for bales of cotton.

N. S. Pearce, general secretary of the international federation, reported that associations in 20 nations voted for, and associations in one nation voted against the federation's resolution to substitute cotton bagging for jute bagging.

### COTTON MILL For Sale at 10% of Cost

8500 Spindles  
260 Looms  
360 H.P. New Diesel Engine  
Brick Buildings  
Good Tenant Houses  
Low Taxes—Good Location  
A Bargain  
For further information communicate G. P. W., care Southern Textile Bulletin.

## Classified Rates

Set Regular "Want Ad" Style, without border or display lines  
—4c per word, each insertion.

Minimum charge, \$1.00. Terms—Cash with order

Set Display Style, with headings in larger type and border—  
\$3.00 per inch, one insertion.

# PRINTING?

## RULED FORMS

### GET OUR QUOTATIONS

#### LETTERHEADS

on any quality of paper and envelopes to match  
Bill Heads                      Factory Forms  
Statements                      Invoices  
Pay Roll Envelopes  
Loose Leaf Systems and Binders

Ledgers, Journals, Cashbooks and Day Books  
Many Mill Forms Carried in Stock

## WASHBURN PRINTING CO.

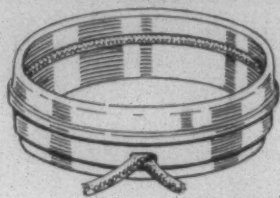
DAVID CLARK, President

118 West Fourth St.

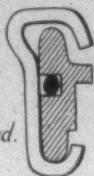
Phone 3-2972

Charlotte, N. C.

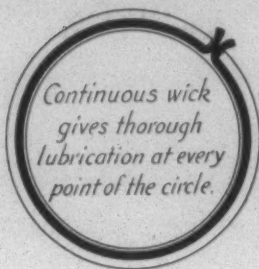




Oil is supplied at actual contact, where most needed.



Patents granted and pending



Continuous wick gives thorough lubrication at every point of the circle.

## Continuous automatic lubrication which is adequate yet clean

(Patents granted and pending)

TO succeed, automatic ring lubrication must be 1. Continuous. 2. Adequate. 3. Clean. The exclusive patented feature of our DIAMOND FINISH Eadie Ring is that the traveler receives lubrication continuously all around the circumference instead of in only one spot. The oil reaches the traveler at the point of its contact with the ring. Since the oil is delivered directly to the traveler we can use a thicker oil than on a one-spot ring, giving truly adequate lubrication. The oil does not fly off, and the rings remain clean in operation.

## Whitinsville (Mass.) SPINNING RING CO.



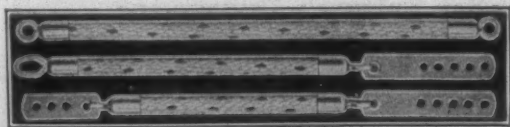
Seydel-Woolley Company

ATLANTA

Textile Chemicals For Best Weaving

A Concern is Known by the Customers It Keeps

## Loom Cords a Specialty



We Also Manufacture

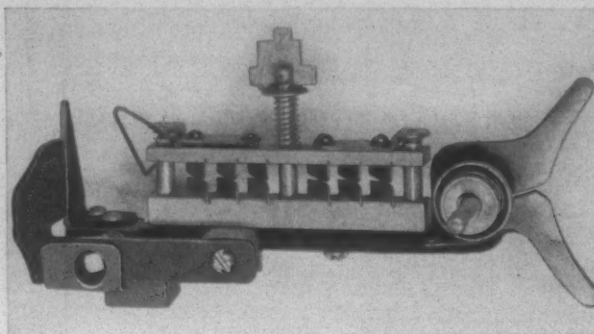
The Improved Dobby Bars and Pegs

Rice Dobby Chain Company

Millbury

:::

Mass.



## Spinners

Have you

Considered the question of making cleaner and more perfect yarn?

You can use the *New Eclipse Yarn Cleaner* and clean your yarn in the winding process.

The *Eclipse Yarn Cleaner* can be attached to Foster and Universal winders.

Why not tackle the job right now? Make ordinary carded yarn cleaner than double-carded yarn with little or no additional operating costs.

Request us to have our representative call and give you a convincing demonstration.



ECLIPSE TEXTILE DEVICES, INC.

Elmira, N. Y.

## ECLIPSE YARN CLEANER

## Want Lower Costs? —then look into lubrication

Over 70% of the leading textile mills—cannot be wrong about the cost-reducing ability of NON-FLUID OIL.

The reasons why are simple—NON-FLUID OIL does not drip, leak or spatter like liquid oils. It effects a positive saving because it *stays in bearings* and off goods, reducing both lubricant and labor cost and practically eliminating oil spot "seconds."

*Write today for free testing sample and bulletin "Lubrication of Textile Machinery."*

New York & New Jersey Lubricant Co.

Main Office: 292 Madison Ave., New York, N. Y.

S. Agent, L. W. Thomason, Charlotte, N. C.

WAREHOUSES

Chicago, Ill.      Providence, R. I.      Atlanta, Ga.  
St. Louis, Mo.      Detroit, Mich.      Charlotte, N. C.  
New Orleans, La.      Spartanburg, S. C.      Greenville, S. C.



MODERN TEXTILE LUBRICANT

*Better Lubrication at Less Cost per Month*

## PRINTING

*All Kinds of*

## MILL and OFFICE FORMS

DAVID CLARK, *Owner*

WASHBURN  
PRINTING  
Company

P. O. Box 974, 18 W. 4th St., Charlotte, N. C.

## Books That Will Help You With Your Problems

### "Clark's Weave Room Calculations"

By W. A. GRAHAM CLARK

*Textile Expert of U. S. Tariff Commission*

Second edition. Completely revised and enlarged. A practical treatise of cotton yarn and cloth calculations for the weave room. Price, \$3.00.

### "Practical Loom Fixing" (Third Edition)

By THOMAS NELSON

Completely revised and enlarged to include chapters on Rayon Weaving and Rayon Looms. Price, \$1.25.

### "Carding and Spinning"

By GEO. F. IVEY

A practical book on Carding and Spinning. Price, \$1.00.

### "Cotton Mill Processes and Calculations"

By D. A. TOMPKINS

Third edition. Completely revised. An elementary text book for the use of textile schools and home study. Illustrated throughout. Price, \$1.00.

### "Remedies for Dyehouse Troubles"

By WM. C. DODSON, B.E.

A book dealing with just that phase of dyeing which constitutes the day's work of the average mill dyer. Price, \$1.50.

### "Cotton Spinner's Companion"

By I. C. NOBLE

A handy and complete reference book. Vest size. Price, 50c.

Published By

Clark Publishing Company  
CHARLOTTE, N. C.